ROLE OF INTERNAL AUDITORS IN WHISTLE BLOWING PROGRAM TO REDUCE CORPORATE FRAUD

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LIST OF ABBREVIATIONS

Abb.	Full Lists
ACFE	Association of Certified Fraud Examiners
AICPA	American Institute of Certified Public Accountants
ANOVA	Analysis of Variance
BMB	Bursa Malaysia Berhad
BNM	Bank Negara Malaysia
CACA	Chartered Association of Certified Accountants
CAE	Chief Audit Executive
CIA	Certified Internal Auditors
CIMA	Chartered Institute of Management Accountants
CPA	Certified Public Accountant
CGFRC	Corporate Governance and Financial Reporting Centre
COSO	Committee of Sponsoring Organisations
DW	Durbin-Watson
EY	Ernst and Young
GAIN	Global Audit Information Network
GLC	Government Linked Companies
IIA	Institute of Internal Auditors
IP	Internet Protocol
MICPA	Malaysian Institute of Certified Public Accountants
NBER	National Bureau of Economics Research
NCFFR	National Commission on Fraudulent Financial Reporting
PWC	PriceWaterhouseCoopers
SAS	Statement on Auditing Standards
SC	Securities Commission
SIA	Securities Industry Act
SOX	Sarbanes-Oxley Act
SPSS	Statistical Package of Social Sciences
TRA	Theory of Reasoned Action
US	United State
VIF	Variance Inflation Factor

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ABSTRAK

Berdasarkan Kajiselidik Fraud (Penipuan) 2004 oleh KPMG Malaysia, 62 peratus responden mengakui bahawa fraud adalah satu masalah yang serius kepada perniagaan di Malaysia. Penemuan kajiselidik ini juga menyarankan kepentingan menubuhkan saluran kommunikasi yang bebas bagi tujuan pemberian maklumat (whistle blowing). Pemberian maklumat adalah salah satu elemen urus tadbir korporat and ia memainkan peranan penting dalam mengurangkan penipuan (fraud). Audit Dalaman boleh membantu Jawatankuasa Audit dalam menubuhkan program pemberian maklumat yang effektif bagi melindungi pekerja dan membantu organisasi menangani penipuan sebelum ia didedahkan kepada pengetahuan umum.

Kajian ini menyelidik tahap pemberian maklumat yang diterima oleh audit dalaman berdasarkan jawapan kepada kajiselidik oleh Ketua Audit Eksekutif dari Syarikat-syarikat Senarai Awam Malaysia (PLC).

Sepanjang dua tahun lepas, hanya 18 peratus dari Ketua Audit Eksekutif yang dikajiselidik telah menerima pemberian maklumat yang sah dari pemberi maklumat luaran dan hanya 14 peratus dari Ketua Audit Eksekutif yang dikajiselidik telah menerima pemberian maklumat yang sah dari pemberi maklumat dalaman. Kekurangan dari segi penubuhan program pemberian maklumat ini disebabkan tiada undang-undang yang mewajibkan penubuhan program pemberian. Walaupun Akta Sekuriti Industri (1983) dan Akta Pasaran Modal dan Perkhidmatan 2007 (CMSA) melindungi para

pekerja, juruaudit dan pegawai-pegawai utama semasa mereka memberikan maklumat, akta ini tidak mewajibkan penubuhan program pemberian maklumat.

Dari segi keberkesanan program pemberian maklumat, kajian ini menunjukkan bahawa persepsi Ketua Eksekutif Audit tentang keberkesanan kod etika mempunyai perhubungan secara negatif dengan kejadian penipuan, iaitu semakin kod etika dilihat sebagai berkesan, kejadian penipuan akan semakin berkurangan.

ABSTRACT

According to Fraud Survey 2004 by KPMG Malaysia, 62 percent of respondents felt that fraud is a serious problem for Malaysian business. The survey finding also highlights the importance of implementing an independent communication channel for whistle blowing. Whistle blowing is one of the elements in corporate governance and it can play an important role in reducing fraud occurrence. Internal auditors can help Audit Committee in creating effective whistle blowing program that protect the employees and enable organisations to address fraud before they become public knowledge.

This study examines the extent of whistle blowing complaints received by internal auditors based on survey responses from 213 Chief Audit Executive of Malaysian Public Listed Companies (PLC).

Within the past two years, only 18 percent of Chief Audit Executive surveyed received genuine whistle-blowing complaints from internal whistle blower and only 14 percent of Chief Audit Executive surveyed received genuine whistle-blowing complaints from external whistle blower. The lack of whistle blowing program implementation in Malaysian companies is possibly due to absence of legislation in Malaysia that forces the establishment of whistle blowing program. Although the Securities Industry Act (1983) and Capital Market and Services Act 2007 (CMSA) provides the employees, independent auditors and key officers' protection when they whistle blow, the act does not compel a whistle blowing program.

On the effectiveness of whistle blowing program, this study shows the CAE perception about the effectiveness of code of ethics in their organisation is negatively related to the fraud occurrence, that is the more the code is perceived as effective, the lesser fraud incidents will occur.

CHAPTER 1

INTRODUCTION

1.0 Introduction

Whistle blowing is commonly defined as "...the disclosure of illegal, unethical or harmful practices in the workplace to parties who might take action" (Rothschild & Miethe, 1994).

The whistle blower is like the referee in a football game, using his whistle to call a foul. The main difference is that the whistle blower has no power to do this, which explains the controversy surrounding it. The whistle blower can be internal, that is someone who works for the organisation or it can be external, someone who is not employed by the organisation but privy to the workings of the organisation. The whistle blower can air his or her complaint internally, through designated channels in the organisation or externally blows the whistle outside the organisation to the media, law enforcement officials, or some other public entity (Figg, 2000).

The rising interest in business ethics has gone hand-in-glove with the interest in whistle blowing (Vinten, 1990a; 1990b). Whistle blowing arrangements are also increasingly seen to be an important component of the corporate governance framework of an organisation. Among "best practices" in corporate governance is the implementation of corporate whistle blowing policies (Olander, 2004).

Whistle blowing is acquiring a new significance as a mechanism of social and internal control (Chiu, 2003). Whistle blowing can play a significant role in the internal and social control of an organisation for the good of all (Rufus & Robert, 2004). The Committee of Sponsoring Organisations (COSO, 1992) specifically alluded to whistle-blowing in the context of efforts related to maintaining an effective control environment within organisations. Ponemon (1994) noted that whistle-blowing "can play an essential role as a preventive and detective control, if the organisation explicitly incorporates reporting mechanisms that disclose incidents of wrongdoing into its internal control structure."

According to Fraud Survey 2004 by KPMG Malaysia, 62 percent of respondents felt that fraud is a major problem for Malaysian business generally. The survey findings also highlights the importance of implementing a well-defined and independent channel for whistle blowing, developing management's ability to identify "red flags" and establishing an effective internal audit function to enable early detection of fraud.

Internal auditors can help management create effective whistle blowing program that protect the employees and enable organisations to address problems before they become public knowledge.

This research aims to provide some empirical evidence about the receipt of whistle-blowing complaints by internal auditors in Malaysia. Motivation for this study comes from the important roles of whistle-blowing in minimising fraud and ensuring an

effective system of internal control, and of internal auditor's role in the whistle-blowing program.

1.1 Background of the Study

In most large organisations, the internal audit function enters the whistle blowing equation once an allegation has been made and an investigation is required (Figg, 2000). Internal auditors are ideally prepared to investigate allegations discreetly within the company. They can determine the most effective way to check whether the complaint is correct without causing unnecessary damage or disruption to other people in the company.

Whistle blowing programs allow management to take corrective action inside a corporation without the negative effects that come with public disclosure, such as financial distress, loss of capital for investors, and a drop in value in the stock market. Employees are encouraged to anonymously disclose their concerns about irregularities in accounting and operational practice through these programs. This way, all employees help the organisation stay on track, and internal auditors, who cannot possibly examine every process and transaction, cast a wider net in their risk management efforts.

Internal auditors can play a vital role in the development of whistle blowing programs by working with management to create a system that protects the confidentiality of the employees who use it and gives them maximum access to the tools that will help them report their concerns.

A number of studies conducted relating to internal audit functions in Malaysia, both in private and public sector. However, there were no previous studies were found relating to the subject of internal audit role in whistle blowing and fraud.

Ernst and Young (2004) undertook a study in Malaysia to develop an understanding of internal audit practice following the tightening of regulations and the increasing importance of risk management and corporate governance practices in Malaysia. Fadzil et al. (2005) conducted a study on the Malaysian listed companies to determine whether the internal audit departments comply with the Standards for Professional Practice of Internal Auditing (SPPIA) and to determine whether compliance with SPPIA affects the quality of the internal control system in the company. Zain and Subramaniam (2007) study provide some insights into internal auditors' perceptions of their interactions with Audit Committee members in Malaysia. Annuar et. al (2001) examines the effectiveness of the internal auditor in Malaysian listed firms while Ahmad et al. (2009) examines the effectiveness of internal audit in Malaysian public sector.

There are studies examining internal audit function in the Malaysian public sector (Ali, Gloeck, Ali, Ahmi & Sahdan, 2007; NAD, 2007; Zamzulaila, Zarina & Dalila, 2007). Ali et al. (2004) looked at existence of internal audit in the State and Local governments of Malaysia.

1.2 Problem Statement

Malaysia seems not to be able to reduce the occurrence of fraud, despite various efforts to promote good corporate governance for example via the establishment of National Integrity Plan. According to the 2009 Corruption Perceptions Index (CPI) by Transparency International, Malaysia is ranked 56th out of 180 nations surveyed with a 4.50 score out of 10, a decrease of 0.60 (from 5.10) from the previous year. CPI score of "10" represents highly clean and "0" represents highly corrupt. Malaysia ranked 47th out of 179 countries in Transparency International's Corruption Perceptions Index for 2008. In the first TI CPI report in 1995, Malaysia was fourth top-ranked Asian country, behind Singapore (No. 3), Hong Kong (No. 17) and Japan (No. 20), but 14 years later, Malaysia has dropped to sixth place when ranked No. 47 in the CPI 2008 report, behind Taiwan (No. 39) and South Korea (No. 40).

Fraud has increasingly become a major problem in Malaysia; the *New Straits Times* (Management Times, 2001) reported that:

More than 60 per cent of the Malaysian listed companies surveyed had experienced some form of fraud. Almost a quarter of the companies surveyed, were found to have suffered more than RM 1 million each to fraud.

According to Fraud Survey 2004 report by KPMG Malaysia, the findings summarised below are of particular importance:

- 62 percent of respondents felt that fraud is a major problem for Malaysian business generally.

- 83 percent of respondents acknowledged experiencing fraud in their organisation. This is an increase of 33 percent from the 2002 survey.
- 36 percent of companies suffered total losses of RM10,001 to RM100,000 to fraudulent conduct in the survey period while 17 percent suffered losses in excess of RM1 million (the "survey period" is the period from January 2003 to December 2004).

With the numerous allegations of financial fraud and doubtful accounting practices in the headlines these days, organisations are increasingly turning to whistle blowing programs to discover and correct improper activities. Whistle blowing is one of the most effective means of fraud detection. Having a well-defined and protected channel for reporting incidents or suspicions of fraud facilitates whistle blowing, which can lead to early detection of fraud. An independent medium that ensures the secrecy of the whistle blower will further encourage whistle blowing in an organisation (KPMG, 2004).

Previous studies have examined issues related to the whistle-blower, in areas such as organisation behavior, ethics, and psychology (e.g. Miceli & Near, 1984; Brabeck, 1984; Greenberger et al., 1987; Near & Miceli, 1985, 1988). While many studies have examined whistle-blowing from the perspective of the whistle-blower, there is little empirical evidence from the perspective of the recipient of the whistle blowing (Read & Rama, 2003). The existing research has not considered a complete view of the whistle blowing process. Previous research has focused on whistle blowers, what they choose to

report, their motivations for reporting, how they choose a reporting channel, and the possible retaliation they encounter after their actions (Guthrie, 2008).

In the United States, Sarbanes Oxley Act (SOX) was enacted in 2002 in response to corporate accounting scandals such as Enron and Worldcom, which were discovered through whistle blowing. SOX (2002) require the Audit Committee of the US listed companies to implement an effective program for whistle blowing in order to reduce the incidences of corporate fraud. The role of internal audit in whistle blowing program is clearly stipulated in the act.

In Malaysia, the whistle blowing provisions are embodied under Capital Market and Services Act 2007 (CMSA) and Securities Industries Act (SIA) which protects the whistle blower when they blew the whistle. The Securities Commission (SC) has introduced provisions to protect whistle blowers when the Securities Industry Act (SIA) was amended in 2004. However unlike SOX, both acts do not enforce whistle blowing program implementation in the listed companies and do not specify the role of Audit Committee in the whistle blowing activities. So far only Government Linked Companies (GLC) had included whistle blowing policies as one of the item for the GLC Transformation Initiatives to improve the transparency of the companies. In the 2004 annual reports, a few listed Malaysian companies have talked about whistle blowing policies which include Government Linked Companies (GLC) like Telekom Malaysia Berhad, Chemical Company of Malaysia Berhad and KPJ Healthcare Berhad. Other listed companies such as Shell Refining Company (Federation of Malaya) Berhad and TH

Group Berhad, touched on their approaches to whistle blowing in their 2003 annual reports.

1.3 Research Questions

The problem that this study dealt with is on how important is the internal audit function in Malaysian listed companies as the independent channel for the whistle blowing program activities. Do the Malaysian internal auditors actually receive genuine whistle blowing complaints for investigation and does this reduce the number of fraud occurrence in Malaysia?

1.4 Research Objective

The objectives of the study are as follows:

1. To examine the extent of the genuine whistle blowing complaints received by internal auditors from the employees and outsiders.

2. To examine the effectiveness of the whistle blowing policies in reducing the number of fraud occurrence.

3. To examine the effectiveness of the whistle blowing communication channel in combating fraud.

4. To examine the effectiveness of the internal auditing as whistle blowing recipient in combating fraud, in terms of its responsibility.

1.5 Research Significance

The results reported in this research may be useful to practitioners (such as internal auditors, top management, audit committee, standard setters and regulatory bodies) and academics in Malaysia, by providing relevant empirical data about an issue of importance to the Malaysian internal auditors.

To the practitioners, the study informs them of the effectiveness of the whistle blowing programs:-

- Internal auditor on their importance of their role as whistle blowing recipient in combating fraud
- Top management on the effectiveness of the whistle blowing programs implementation in their organization
- Board members or audit committee on the effectiveness of the internal auditors as the whistle blowing recipient in reducing fraud
- Standard setters e.g. IIA in developing standards related to IA roles in whistle blowing
- Regulatory Bodies e.g. BNM, SC in formulating guidelines on whistle blowing programs implementation

The data obtained from this study will provide empirical grounding for future research questions related to whistle blowing and internal auditing in Malaysia.

To the academician, this study examines the agency theory in terms of internal audit effectiveness as an agent to the principal (e.g., top management, board members or audit committee) in combating fraud. Internal audit is a feedback mechanism with the result that the principals have the ability to remedy any weaknesses in procedures before they have a significant effect on the overall internal control system and the financial condition of the organisation.

1.6 Definition of Key Terms

For the purpose of this research study, the following terms were utilised:

1. Internal auditing: Internal auditing is an independent, objective assurance and consulting activity designed to add value and improve an organisation's operations. It helps an organisation accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes.

2. Whistle blowing: Whistle blowing is generally defined as "...the disclosure of illegal, unethical or harmful practices in the workplace to parties who might take action" (Rothschild & Miethe, 1994).

3. Fraud: Fraud is defined by the Malaysian Approved Standards on Auditing (2001), AI No. 240, as:

An intentional act by one or more individuals among management, employees, or third parties, which results in a misrepresentation of financial statements

4. Whistle Blowing complaints practice refers to the genuine whistle blowing disclosure by the employee or outsiders to the internal audit function.

5. Policies refer to the whistle blowing policy and code of ethics which lets the employees know what is, or is not, acceptable behavior and allows sensitive issues to be dealt with internally.

6. Whistle Blowing Communication Channel is also called a fraud or ethics hotline, is needed to encourage people to reveal what they know about wrongdoing and, when needed, to protect them from potential reprisal.

7. Whistle Blowing Recipient refers to the party that is responsible for receiving the whistle blowing complaints receipt

1.7 Overview of the Study

This study is organized into five chapters. Chapter 1 provides the background of the study, problem statement, research questions, research objectives, research significance, definition of key terms and organisation of the remaining chapters.

Chapter 2 contains literature review and previous research that are related to this study. The review presented in this chapter includes a discussion of the overview and roles of the internal auditing and the relation of the whistle blowing activities to the internal

auditing function. This chapter further discusses the whistle blowing policy and communication channel. Finally, the chapter presented several literature focusing on the whistle blowing recipient i.e. the internal auditing function.

Chapter 3 describes the research framework and methodology employed in the study. Hypothesis, research design, sample and data collection, research instrument, operational definition and measurement of the variables, method of data analysis are also discussed in this chapter.

Chapter 4 presents an analysis and interpretation of the results of the study. This chapter will discuss unsolicited as well as requested responses to the survey form and an interpretation of the statistical findings.

Finally, Chapter 5 summarises and discusses the major findings, implications and limitations of the study including a statement as to the conclusions reached. In addition, recommendations for further research are also included in this chapter.

CHAPTER 2

LITERATURE REVIEW

2.0 Introduction

This chapter presents an overview of the literature that relates to the topic under investigation namely the internal audit role in whistle blowing program to reduce fraud. This chapter starts with the discussion on the dependent variable that is fraud, followed by overview on whistle blowing, the roles of internal audit, whistle blowing complaints practice and finally the components of the whistle blowing programs

2.1 Fraud

There are various definitions of fraud. Malaysian Approved Standards on Auditing (2001), AI No. 240, defined fraud as: An intentional act by one or more individuals among management, employees, or third parties, which results in a misrepresentation of financial statements.

Weirich and Reinstein, (2000) defined fraud as intentional deception, cheating or stealing and can be committed against users such as investors, creditors, customers or government entities.

Statement on Auditing Standards (SAS) No. 82 identified two categories of fraud as fraudulent financial reporting and misappropriation of assets. Fraudulent financial reporting (management fraud) is where management seeks to inflate reported profits or other assets by overstating assets and revenues or understating expenses and liabilities in

order to embellish the financial statements. Misappropriation of assets (employee fraud) is where employees steal money or other property from their employers. Various fraud schemes could include embezzlement, theft of company property and bribery (Alleyne & Howard, 2005).

The Association of Certified Fraud Examiners (ACFE, 2008) defined occupational fraud as: the use of one's occupation for personal enrichment through the deliberate misuse or misapplication of the employing organisations' resources or assets. Common types of fraud include falsifying cash sales, creating fictitious creditors, undeclared stock, "ghosts" on the payroll, making unauthorised "write-offs", and claiming excessive or never incurred expenses. ACFE model for categorising fraud is known as the fraud tree. The fraud tree classifies fraud into three categories i.e. asset misappropriation, fraudulent financial statement and corruption.

Asset misappropriation schemes are frauds in which the perpetrator steals or misuses an organisation's resources. Common examples of asset misappropriation include false invoicing, payroll fraud, and skimming (ACFE, 2008).

Corruption refers to schemes in which fraudsters use their influence in business transactions in a way that violates their duty to their employers in order to obtain a benefit for themselves or someone else. For example, employees might offer or receive bribes, engage in conflicts of interest or extort funds from third parties. Financial statement fraud involves the intentional misstatement or omission of material information

from the organisation's financial reports; these are the cases of "cooking the books" that often make front page headlines (ACFE, 2008).

Financial statement fraud cases often involve the reporting of fictitious revenues or the concealment of expenses or liabilities in order to make an organisation appear more profitable than it really is (ACFE, 2008).

The difference between the SAS and ACFE categories of fraud is that ACFE had one additional element that is corruption. However, this study utilises SAS fraud categories since this study examines fraud from the perspective of the auditors.

There are several factors that influenced fraud occurrence and this is known as the Fraud Triangle. The Fraud Triangle describes three factors that are present in every situation of fraud. SAS No. 99 also includes the fraud triangle that is in order for fraud to occur, three conditions must be present:

1. Incentive or pressure - a reason to commit fraud.
2. Opportunity - e.g., ineffective internal controls, override of internal controls.
3. Attitude or rationalization - ability to justify the fraud to oneself.

Opportunity to commit fraud can be reduced if the internal controls are in place and effective. Whistle blowing program is one the internal control that can have an impact on the fraud occurrence.

Fraud is believed to be amongst the most serious corporate problems, and challenges in today's business environment. Palshikar (2002) suggests that: Fraud or scam is a dominant white collar crime in today's business environment, many government organisations and businesses, particularly in financial related services, suffer from various kinds of fraud.

Fraudulent financial reporting and asset misappropriation have become major costs for many organisations (Bierstaker, Brody and Pacini, 2006). The average estimated loss per organisation from economic crimes globally is US$2,199,930 over a two-year period (PriceWaterhouseCoopers, 2003). In the United States, the Association of Certified Fraud Examiners (ACFE) estimates that about seven percent of firm revenues, or US$994 billion, is lost per year as the result of occupational fraud (ACFE, 2008). In Malaysia, more than 60 per cent of the listed companies surveyed had experienced some kind of fraud. Of the companies surveyed, almost a quarter were found to have lost more than RM 1 million each to fraud (Management Times, 2001).

Fraud, due to complex nature, does not lend itself to be scientifically observed or measured in an accurate manner. ACFE examined 15 specific anti-fraud controls and measured the median loss in fraud cases depending on whether organisations did or did not have a given control at the time of the fraud. For example, organisations that conducted surprise audits suffered a median loss of US$70,000, while those that did not had a median loss of US$207,000 (ACFE, 2008).

KPMG Malaysia 2004 Fraud survey asked whether fraud is a major problem within the business, whether fraud will increase, decrease or stay the same over the next 2 years and the estimated loss due to fraud. Thirty six (36) percent of Malaysian listed companies suffered total losses of RM10,001 to RM100,000 to fraudulent cases while 17 percent suffered losses in excess of RM1 million (KPMG 2004).

2.2 Overview of Whistle Blowing

There is no universally accepted concept of whistle blowing. A broad definition would encompass disclosure by employees and former employees of malpractice, as well as illegal acts or omissions at work (Lewis, 2006).

Whistle blowing has four components (Johnson, 2003):

a) A person acts with the intention of making information public;
b) The information is transmitted to people outside the organisation who make it public and a part of the public record;
c) The information has to do with possible or actual nontrivial wrong-doing in a company; and
d) The individual exposing the organisation is not a journalist or ordinary citizen, but an employee or former employee of the organisation.

Whistle blowing is one of the important ways to prevent and deter fraud, waste, and abuse. *Time Magazine* named three female whistle blowers as "Persons of the Year" in 2002 for "people who did right just by doing their jobs rightly" and for their courageous

actions (Lacayo & Ripley, 2003). They are Sherron Watkins, the Vice President of Enron, Cynthia Cooper, the Vice President of Internal Audit at WorldCom and Coleen Rowley, the FBI staff attorney.

Sherron Watkins wrote a letter to Enron chairman Kenneth Lay in the summer of 2001 warning him that the company's methods of accounting were improper. Cynthia Cooper exploded the bubble when she informed WorldCom's board that the company had covered up US$3.8 billion in losses through a massive accounting fraud. Coleen Rowley caused a sensation with a memo to the FBI Director, Robert Mueller. After the September 11, 2001 attacks. Rowley wrote a paper for FBI Director documenting how FBI Head Quarters personnel in Washington, D.C., had mishandled and failed to take action on information provided by the Minneapolis, Minnesota Field Office regarding its investigation of suspected terrorist.

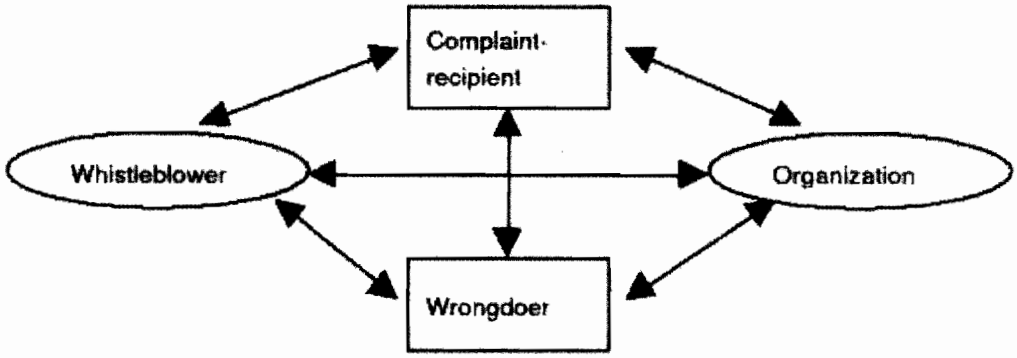
From the perspective of the employers, workers who inform their managers about wrongdoing in the first place give them the opportunity to correct it before the matter escalates (Lewis, 2006).

Keenan and Krueger (1992) surveyed executives in many different companies regarding their perception of whistle blowing. The results indicated that 65 percent of them have observed fraud, waste or mismanagement in their companies. However, only 32 percent indicated that the whistle blowing system in their organisation was effective. The Association of Certified Fraud Examiners reported that the percentage of frauds detected

internally in the US organisations by whistle blowing was a surprising 40 percent in 2004 (Verschoor, 2005).

The effectiveness of whistle blowing is defined as "the extent to which the questionable or wrongful practice (or omission) is terminated at least partly because of whistle blowing and within reasonable timeframe" (Near & Miceli, 1995). Whistle blowing involves the dynamic interaction of several parties and the following simple framework can be used to understand this process of interaction (Near & Miceli, 1995).

***Figure 2.1*: Whistle Blowing Process Model**



As Figure 2.1 shows, whistle blowing effectiveness will be determined by the combined outcomes of the six (6) interactions:

- between the whistle blower and the complaint recipient;
- between the whistle blower and the organisation;
- between the whistle blower and the wrongdoer;
- between the complaint recipient and the wrongdoer;
- between the complaint recipient and the organisation;
- between the wrongdoer and the organisation.

In turn, the outcomes of these interactions will depend on the characteristics of the five (5) primary actors in whistle blowing (Near & Miceli, 1995).

- Characteristics of the whistle blower;
- Characteristics of the complaint-recipient;
- Characteristics of the wrongdoer;
- Characteristics of the wrongdoing;
- Characteristics of the organisation.

Essentially, the credibility and power of whistle blowers, complaint recipients, or wrongdoers affect the overall outcome of a whistle blowing incident. The organisational and societal support to whistle blowers or wrongdoer is also crucial in determining the outcomes of whistle blowing. Lastly, the willingness of the organisation to change a questionable practice determines whistle blowing effectiveness.

2.3 The Roles of Internal Auditing

At the June 1999 International Conference of the Institute of Internal Auditors (IIA), the professional association of internal auditors, the Board of Directors approved an updated definition of internal auditing. The new definition of internal auditing is designed to accommodate the profession's expanding roles:

"*Internal auditing is an independent, objective assurance and consulting activity designed to add value and improve an organisation's operations. It helps an organisation accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes.*"

From the new definition, internal audit plays an important role in assurance and consulting activities to improve risk management, control and governance. Assurance activities are basically examination of evidence to provide independent assessment on governance, risk management, and control processes. Examples of assurance activities include financial, compliance, system security and due diligence engagements. Consulting activities is advisory activities, to improve governance, risk management, and control without the internal auditor assuming management responsibility. Examples of consulting activities include counsel, advice, facilitation, and training.

Internal audit plays an important monitoring role in evaluating the effectiveness of control systems because of their position and authority in the organisation (COSO, 2003). Management today rely upon internal audit to provide assurance, confidence and trust that the internal controls are operating effectively (Al-Twaijry, Brierley and Gwilliam, 2003). The role of internal auditing in the review of effectiveness of internal control is to determine whether it functions as planned (Fadzil, Haron and Jantan, 2005).

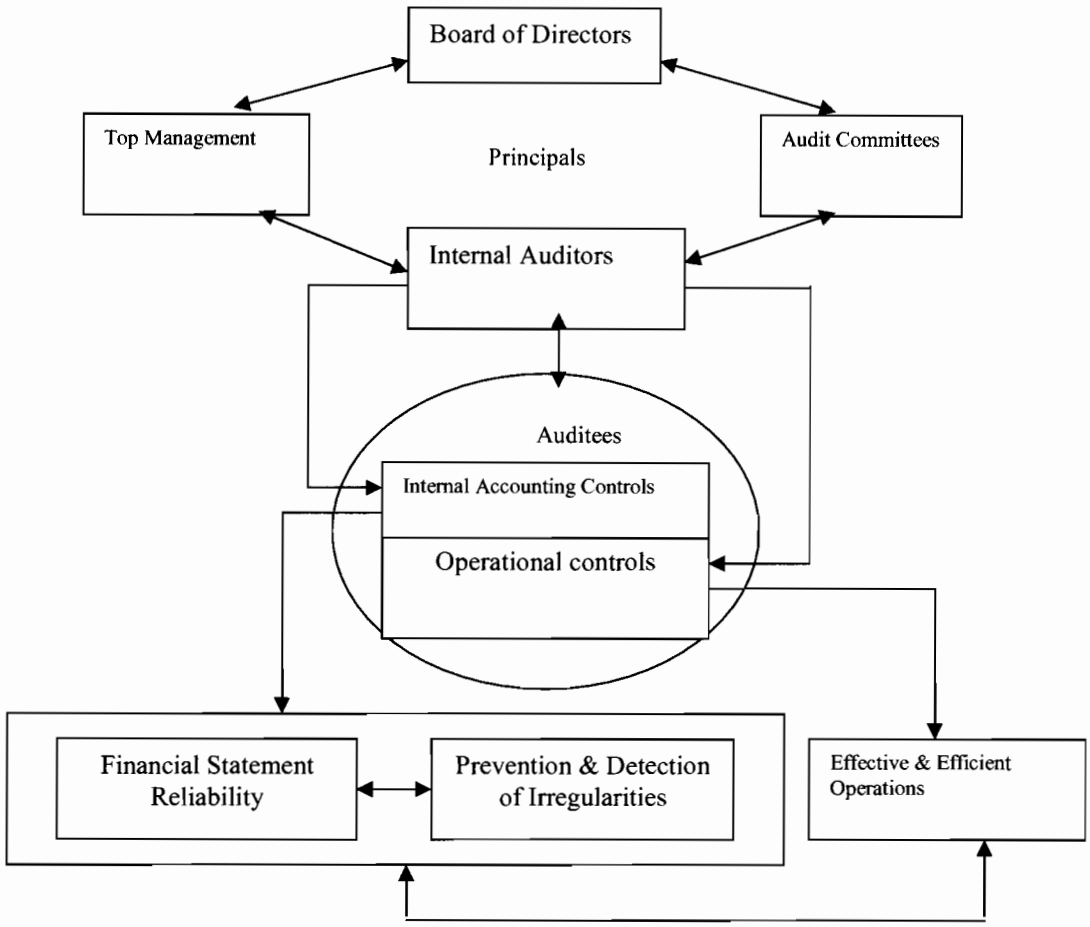
The role of internal audit with regard to risk management is to provide objective assurance to boards that the main business risks are properly managed (IIA, 2004). This role is considered as a necessary input for the evaluation of the internal control and it is an integral part of their assurance role (Gerrit & Ignace, 2006). The roles of internal audit relating to risk management are also stated in the Malaysia Code on Corporate Governance and in its definition by The IIA Malaysia Code of Ethics.

Internal audit is considered an important governance tool to protect corporations from internal criminal behaviour (Nestor 2004). According to the Malaysian Code on Corporate Governance perspective, internal audit is one of the four cornerstones of corporate governance, along with the board, management, and external audit. The Performance Standard 2130 of the IIA's International Professional Practices Framework states that internal audit should assess and make appropriate recommendations for improvement the governance process. Dittenhofer (2001) and Goodwin (2004) stated that internal audit function is emerging as an important element of governance mechanism both in private and public sectors.

Figure 2.2 shows the internal auditor roles that is viewed as a monitoring agent who audits various levels of manager-agents (auditees) or the control mechanism (for example accounting and operational controls) over these agents on behalf of the principal(s). Acting as a monitoring agent, the internal auditor is expected to perform two interrelated functions, assurance and consulting. These are performed to maintain reliability of financial statements, prevent occurrence of irregularities and enhance effectiveness and efficiency of operations (Neuman, 1981). Thus, the demand for internal auditing is presumed to arise due to an accountability relationship between two (or more) parties (for example, top management versus board member) (DeAngelo, 1981; Evans, 1980). Figure 2.2 also depicts the principals of the internal auditor. From 1940 to 1960, the internal auditor often viewed his principal as being singular in nature – the controller. Later after 1960, internal auditors found that they had multiple principals (e.g., top management,

board members or the audit committee thereof), each with strong demands on the internal auditor to discharge his responsibilities to the organisation and society at large.

***Figure 2.2*: Internal Auditor's Role**



Source: Evans (1980); Neuman (1981); DeAngelo (1981)

2.4 Theory Involved

Agency theory is widely taught in management schools and is derived from the financial economics literature. This theory postulates that the firm consists of a nexus of contracts between the owners of economic resources (the principals) and managers (the agents) who are charged with using and controlling those resources (Jensen & Meckling, 1976).

This theory is also based on the premise that agents have more information than principals and that this information asymmetry adversely affects the principals' ability to monitor effectively whether their interests are being properly served by agents (Adams, 1994). It also assumes that principals and agents act rationally and use the contracting process to maximise their wealth.

The relationship between principals and agents will incur contracting costs in ensuring the pareto-optimality in the contracting process where the principals will incur monitoring expenditures while the agents incur bonding costs (Adams, 1994). The cost of internal audit is an example of this bonding cost.

Other writers also recognised the role of internal auditing as a bonding function in the contracting process of the firm. Sherer and Kent (1983) perceived internal auditing to be "a bonding cost borne by the senior managers to satisfy the demands for accountability made by external participants, especially shareholders". They also argued that internal audit is an adjunct of the function performed by external audit, "the difference being that the cost of an internal audit is incurred directly by the managers and that agent/managers have an incentive to incur the costs of internal audit if the total cost of the audit process, both internal and external, is less than the perceived cost of external auditing on its own". They also believe that internal audit is a feedback mechanism with the result that management has the ability to remedy any weaknesses in procedures before they have a significant effect on the overall internal control system and the financial condition of the organisation.

2.5 Whistle Blowing Complaints Practice

Whistle blowers may be internal or external to an organisation. A person may become a whistle blower, if they feel or believe that the fraud or wrongdoing may ultimately harm the organisation, its employees, society, and, possibly, national security, if the fraud or wrongdoing will continue without a whistle blowing (Miethe & Rothschild, 1994).

Read and Rama (2003) in their study asked whether the Chief Audit Executive (CAE) had received any whistle blowing complaints from the employees and outsiders and whether the complaints are related to financial fraud or violation of policies.

Survey conducted by The IIA's Global Audit Information Network (GAIN) on "Whistleblower Complaint Reporting Practices," measured the percentage of complaints received through the whistle blowing system that are financial in nature (e.g. financial reporting) and percentage of complaints received through the whistle blowing system that are not financial in nature (Millage, 2008).

2.5.1 Disclosure by Employees

Whistle blowing is an effort by a member or past member of an organisation to deliver a warning to the public concerning a serious wrongdoing or danger created or masked by the organisation (Ahem & McDonald, 2002; Bolsin, Faunce, & Oakley, 2005; Davis & Konishi, 2007).

Internal whistle blowers are typically more aware of unethical acts but may be more scared of consequences of blowing the whistle, such as loss of job or being hated within the organisation (Read & Rama, 2003)

Researchers have generally found that internals are more likely than externals to engage in pro-social behaviour (Spector, 1982). As whistle blowing is a pro-social behaviour, internals are more likely than the externals to engage in whistle blowing activity. Meanwhile, in a controlled field setting study of whistle blowing under conditions of threat of retaliation, internals were no more likely to blow the whistle than externals (Miceli et al., 1991).

Read and Rama (2003) in their study found that 69 percent of the complaints were received from employees and 36 percents were received from outsiders.

2.5.2 Disclosure by Outsiders

Johnson, et. al., (2004) suggest that whistle blowers could include suppliers, vendors or professional community members that possess information and communicate publicly about issues of perceived wrongdoing.

Whistle blowers external to the organisation may have less to fear from the consequences of whistle blowing but may not have as much at stake about the absence of unethical acts in a particular organisation, or may not be aware of the extent of unethical acts. (Read & Rama, 2003)

2.6 Policy

Organisations that have that have suffered from fraud have implemented more tangible measures such as whistle blowing policies while organisations that have not been fraud victims tend to rely more on intangible prevention tools such as codes of conduct (PriceWaterhouseCoopers, 2003).

2.6.1 Whistle Blowing Policy

Whistle blowing policy is not designed to be a code of conduct; it is designed to address the issue of reporting violations of the code of conduct. In general, it should prohibit unlawful activity of any kind and refer to the code of conduct (Olander, 2004).

Olander (2004) highlighted that the whistle blowing policy should:-

- Address briefly how reported violations will be handled. Receipt of the suspected or reported violation should be acknowledged to the sender within a specified amount of time.
- Include a provision stating that anyone filing a complaint regarding a violation or suspected violation of the code of conduct or of the law must be acting in good faith and have reasonable grounds for believing the information disclosed indicates a violation of the code.
- Make clear that the employer will not tolerate or condone retaliation against anyone that comes forward with allegations of wrongful conduct.

2.6.1.1 Whistle Blowing Policy and Fraud

Effective whistle blowing policy can help to foster good relations, avoid crisis management and minimise damaging incidents. (Lewis 2001). A well-structured whistle blowing policy is vital in the fight against fraud, according to Tony Parton, a partner in forensic services at PricewaterhouseCoopers (Baker, 2008). An effective whistle blowing policy can help an organisation convey its ethical practices to its employees and protect itself against fraud (Eaton & Weber, 2008). Whistle blower policy and effective enforcement has the potential not only to significantly reduce fraudulent activity but also to send a signal to both internal and external constituencies that the organisation exercises good corporate governance (Eaton & Akers, 2007).

Whistle blowing policy is one of the techniques utilised to reduce the direct and indirect costs associated with all forms of fraud. In a study by Bierstaker, Brody and Pacini (2006), auditors were asked to rate the effectiveness of whistle blowing policy to prevent and detect fraud in their organisation. On a scale from 1 (completely ineffective) to 7 (completely effective), the whistle blowing policy effectiveness mean was 4.58. Therefore, whistle blowing policy is fairly effective in preventing and detecting fraud.

Eight out of 10 companies around the globe say they have a whistle blowing policy in place, but only half of them say the policy is effective, according to a survey by professional services firm PricewaterhouseCoopers (PwC). In some geographies-notably Western Europe-corporate confidence in whistle blowing is even lower. Only United

State (U.S.) companies say they are getting whistle blowing right-just about every U.S. company in the survey that has a policy in place says it is effective (Baker, 2008).

Eaton and Akers, (2007) suggested that a whistle blowing policy cannot be effective unless it is communicated to employees, vendors, customers, and shareholders. Internally, employees can be informed via the employee handbooks, intranet sites and training could be provided during the human resources orientation process. Externally, information can be posted throughout the company web sites and customer service representatives can be trained to answer questions about the company whistle blowing policy.

Olander (2004) suggested that timing is crucial for an effective whistle blowing policy. Hence, employees should be made aware that the earlier a concern is highlighted, the easier it is to take action and correct the situation

2.6.1.2 Whistle Blowing Policy and Complaints

Organisations can encourage such people to make their complaints or worries known by establishing formal whistle blowing policy (Baker, 2008). Having a robust whistle blowing policy in place is good practice and it might discourage potential whistle blowers from approaching the press as a first resort. In addition, businesses need to engender a culture in which employees believe their concerns will be taken seriously (Durant, 2004). Whistle blowing policy is intended to encourage and allow employees and others to raise

serious concerns within the company rather than seeking resolution outside the company. (Olander, 2004)

According to the CPA Australia Corporate Governance and Financial Reporting Centre (CGFRC) 2006 survey of their members in Hong Kong, Singapore and Malaysia, more respondents are willing to make whistle blowing complaints if there is a whistle blowing policy in place. The survey findings support the value of having a formal policy in place because it significantly encourages people to blow the whistle (Teen & Vasanthi, 2006).

2.6.2 Code of Ethics / Conducts

Code of ethics is quite general document, that identifies and states the principles and the values of the people to whom they apply and do not establish sanctions and punishments for violations of the code itself. Code of conduct, on the other hand, are more specific documents that indicate in some detail what types of behavior area acceptable in specific circumstances. Code of conduct is intended to provide guidance and establish sanctions and punishments for violations of the dispositions of the code (Bruce, 1996). Codes of conduct are more specific and leave less to discretion than codes of ethics (Brien 1989).

In practice, Code of conduct is used interchangeably with Code of Ethics. Due to the similarities of purpose between codes of ethics and codes of conduct, the terminology is often mistakenly used interchangeably (Willa Bruce, 1996). Various names are being used by listed companies in Malaysia e.g.:

Table 2.6
Example of Various Names for Code of Ethics and Conducts in Malaysia

Code of Ethics and Conduct	Maybank, AIC Corporation, Hong Leong Assurance
Code of Ethics and Business Conduct	Cahaya Mata Sarawak
Business Ethics & Code *of* Conduct	Titan Chemical Group
Code of Conduct	Colgate, Digi, Petronas, Dutch Lady, Proton
Code of Ethics	Public Bank,AMBank Group, Media Prima
Business Ethics	Esso
Code of Business Conduct	IOI Group

Source : Annual reports available at various company websites

Whistle blowing also may be viewed in the overall ethical framework of an organisation. Top management can show its commitment to the ethical climate by having and enforcing a code of conduct (NCFFR, 1987 and COSO 1992). This code would help in setting the ethical tone at the top and creating open channels of communication, thus preventing fraudulent financial reporting and other breakdowns within the financial reporting system.

Codes of ethics are vital for organisations since it implicitly set limits for unethical behaviour and it offer guidance in ambiguous situations. Codes of ethics can help to perform several organisational functions, for example by explicitly stating the ethical values that were previously unclear or unstated, alert employees as to what actions are unethical and unpunishable, and help firms shift accountability of actions from the organisation to the individual (Gellerman, 1989).

2.6.2.1 Code of Ethics / Conducts and Fraud

Survey studies have established that codes of ethics are thought to be relevant and important to organisations and their employees (Martinov, 2004; Lamberton et al., 2005). Lamberton et al. (2005) found that US firms that possess a code of ethics were more ethically concerned and 90 per cent of the managers surveyed believed that a code of ethics is an important factor in resisting unethical behaviour.

Brief et al. (1996) specifically examined the effect the existence of a firm's code of conduct had on the frequency of fraudulent-financial reporting by executives and financial controllers and found no significant results. The subjects were given seven role plays requiring a decision of whether or not to misrepresent their firm's financial statements and found the occurrence of fraudulent reporting to be high despite the presence of a code of ethics. The lack of positive relationship between the presence of a code of ethics and individuals' ethical behaviour is also reported by Pater and Van Gils (2003). A negative relationship was reported by Pater and Van Gils (2003) between the ethical behaviour of management consultants' and their organisations' possession of a written code of ethics. In contrast, studies by Barnett and Vaicys (2000) report findings that the presence of a code of ethics has a positive impact on ethical behaviour.

Ernst and Young (EY) 10th Global Fraud survey conducted in 2007 and 2008 interviewed nearly 1,200 executives across the world (from 33 countries) about their experiences of bribery and corruption. On the questions of code of ethics, approximately 90 percent of

the respondents have one. Four out of five of those that have the code believe it is useful in preventing and detecting bribery.

Code of ethics is one of the various techniques utilised to reduce the direct and indirect costs associated with all forms of fraud. In a study by Bierstaker, Brody and Pacini, (2006), auditors were asked to rate the effectiveness of the code of ethics to prevent and detect fraud in their organisation. On a scale from 1 (completely ineffective) to 7 (completely effective), the code of ethics effectiveness mean was 4.83. Therefore, code of ethics is moderately effective in preventing and detecting fraud.

Nevertheless, code of ethics is only effective when it is communicated and enforced consistently throughout the organisation (Rufus & Robert 2004). Organisations with a code of conduct in place suffered a median loss of US$126,000, compared with the median loss of US$232,000 in organisations where there was no such code (ACFE, 2008).

2.6.2.2 Code of Ethics / Conducts and Complaints

Employees are in a better position than anyone else to observe and report organisational fraud, and wise companies will make good use of the many eyes and ears available to them. One of the most critical factors influencing an employee's decision to report questionable acts is the existence of a comprehensive ethics code in the organisation and regular employee training with respect to that code (Johnson & Wright, 2004).

2.7 Whistle Blowing Communication Channel

A whistle blowing channel, also called a fraud or ethics hotline, is needed to encourage people to reveal what they know about wrongdoing and, when needed, to protect them from potential retaliation. Hooks et al. (1994) found codes of conduct alone have little impact if top management does not reinforce them by actions such as establishing reporting channels and encouraging their use. Internal auditors challenge is to develop hotline communications specifically designed with fraud prevention as a primary deliverable (Slovin, 2006).

2.7.1 Anonymous Hotline

Whistle blowing hotline includes a dedicated hotline number, fax number, web site, e-mail address and regular mail or post office box address (AICPA, 2005). Internal auditors will find that the best whistle blowing results are achieved by offering several reporting options to accommodate individual preferences (Slovin, 2006). Possible reporting methods include telephone hotlines, fax lines, a web page on the company's intranet, e-mail (IIA, 2003). A survey conducted by The IIA's Global Audit Information Network (GAIN), "Whistleblower Complaint Reporting Practices," reveals that more than 80 percent of the Chief Audit Executive (CAE) respondents' organisations have established hotlines to receive complaints. Almost 60 percent use an e-mail address or Web site. Twenty-three percent receive complaints by letter or mail and nearly 15 percent receive complaints through the CAE or internal audit contact (Millage, 2008).

Several companies have developed information channels to facilitate the flow of information from stakeholders, to identify unethical behavior or more general lack of social responsibility in relation to business operations. Examples include telephone hotlines or cyber-hotlines where company employees (or others) are encouraged to alert anonymously about waste, and mismanagement (www.nasa web, 2007), or fraud and corruption (www.worldbank web, 2007).

In order to encourage fraud reporting especially where it involves management, anonymous reporting is necessary (AICPA, 2005). In other word, the key defense against management override of internal controls is a process for anonymous submission of suspected wrongdoing (AICPA, 2005).

An anti-fraud approach that is becoming more common is the use of anonymous telephone hotlines (Holtfreter, 2004). Hotline is one of the communication channels that ensure confidentiality of the whistle blower. (ACFE, 2008) The Ernst and Young survey in 2002 highlighted employees' preference for telephone hotlines as a whistle blowing tool. 57 percent of respondents stated they would use a telephone hotline to report unethical behaviour, while 20 percent would write anonymous letter and 16 percent would use anonymous web site (Slovin, 2006).

The ultimate effectiveness of an anonymous reporting channel as a mechanism for preventing and detecting financial fraud has not been validated by empirical studies, as existing research in this area has focused entirely on employees‘ reporting intentions

(e.g.: Kaplan & Schultz, 2006, 2007; Ayers & Kaplan 2005). Kaplan and Schultz (2006, 2007) warn that the ultimate effectiveness of anonymous whistle blowing could be compromised because those who are responsible for investigating such allegations might be less thorough relative to non-anonymous reports.

According to ACFE's 2008 Report to the Nation on Occupational Fraud and Abuse approximately half of fraud tips came through a hotline when that mechanism was available and 63 percent of the hotline reports involved fraud by a manager or executive. These are cases in which confidentiality would more likely be a consideration of the whistle blower (ACFE, 2008).

2.7.2 Anonymous Hotline and Fraud

Providing a channel for employees to report concerns about accounting and other irregularities is no longer optional because employee reporting is so critical in the detection of fraud. Reporting mechanisms offer a tremendous opportunity for companies to reduce their fraud exposure (Johnson & Wright, 2004).

The American Institute of Certified Public Accountants (AICPA) has recommended that all organisations seriously consider establishing a whistle blowing hotline due to the fraud detection benefits (Slovin, 2006).

Ernst and Young 10th Global Fraud survey conducted in 2007 and 2008 interviewed nearly 1,200 executives across the world (about 33 countries) about their experiences of

bribery and corruption. On the question on successful measures to deter fraud, less than a third put a whistle blowing hotline as the most successful measures (Ernst and Young, 2008).

Hotline is a very cost effective means for detecting occupational fraud and abuse (Pergola & Sprung, 2005) and has repeatedly proven its ability to detect and deter illegal behavior. When a hotline is present, fraud losses are reduced by nearly 60 percent, based on to the ACFE's 2004 Report to the Nation on Occupational Fraud and Abuse. In fact, fraud is discovered via tips from the hotline 40 percent of the time, making tips the number one method of fraud detection (Slovin, 2006). Organisations with a hotline suffered a median loss of US$100,000, compared with the median loss of US$250,000 in organisations without (ACFE, 2008)

Since the introduction of U.S. Sarbanes-Oxley Act of 2002 and UK Combined Code on Corporate Governance, most public corporations and many private organisations have implemented a whistle blowing hotline to help curtail fraud loss. For internal auditors, this may be the most useful aspect of the whole governance reform movement, because an effective hotline is a powerful tool for fighting fraud (Slovin, 2006).

Fraud hotline is one of the various techniques utilised to reduce the direct and indirect costs associated with all forms of fraud. In a study by Bierstaker, Brody and Pacini, (2006), auditors were asked to rate the effectiveness of fraud hotline to prevent and detect fraud in their organisation. On a scale from 1 (completely ineffective) to 7

(completely effective), the fraud hotline effectiveness mean is 4.63. Therefore, fraud hotline is somewhat effective in preventing and detecting fraud.

In January 2005, AICPA Antifraud Programs and Controls Task Force released a tool designed to help organisations evaluate the effectiveness of their hotlines. Among the AICPA's suggestions for implementing and maintaining an effective whistle blowing hotline program (Slovin, 2006):

- Cultivate a vigorous whistle blower program. Use dedicated, well-communicated feedback channels
- Staff the hotline 24 hours a day, 7 days a week with trained interviewers.
- Avoid the use of voice mail.
- Nurture an ongoing dialogue. Assign password or unique identification number to each anonymous caller and direct individuals to call back within a specified interval.
- Protect confidentiality. Avoid using e-mail tracking, caller ID or other means that can track the communication.

2.7.3 Anonymous Hotline and Complaints

As a rule of thumb, the greater the distance the communication must travel and the more links it must go through, the more likely it is that a communication will be inhibited. When communication is constrained, employees are prone to report externally, as opposed to internally. The structure and integrity of the reporting process itself are perhaps the most critical features that a company can actually influence to encourage employee reporting. First, a reporting process must exist, and employees must know what

the process is and how to use it, because they are likely to report externally if uninformed of the internal channels. Second, the reporting process should provide maximum assurance of confidentiality, integrity, and safety from retribution. If one principle is breached, it will destroy the credibility of the entire process (Johnson & Wright, 2004). In order to encourage reporting, a whistle blowing procedure should assure potential users that, whenever possible, the organisation will protect the identity of those who raise a concern and do not want their name disclosed (Lewis, 2006).

A study by the National Bureau of Economics Research (NBER) finds that there are severe disincentives to report fraud using non-anonymous channels. Their analysis of 230 non-anonymous fraud allegations finds that 82 percent of employees who blew the whistle either lost their job, quit under duress, or lost significant job responsibilities (Dyck et al., 2007).

A hotline allows and encourages employees to provide confidential, inside information without the fear of reprisal that accompanies being a whistle blower (Pergola & Sprung, 2005). A confidential internal whistle blowing hotline can provide a valuable outlet for concerned employees and add value to the organisation (Rufus & Robert, 2004).

According to the Certified Public Accountant (CPA) Australia Corporate Governance and Financial Reporting Centre (CGFRC) 2006 survey of their members in Hong Kong, Singapore and Malaysia, 95 percent of the respondents felt that more employees would whistle blow if they could do so anonymously (Teen & Vasanthi, 2006).

One in five American workers have personal knowledge of workplace fraud, according to a 2002 study sponsored by Ernst and Young LLP, and 39 percent are more likely to report fraud if they could remain anonymous. One possible explanation for the need to remain anonymous is the fear of retaliation that is inspired by the whistle blower protections outlined in the Sarbanes-Oxley Act (Slovin, 2006). Employees will be more likely to express concerns and less fearful of retaliation with the existence of formal and specific channel for reporting. For greatest impact, the reporting channels should allow anonymous communication (Lachman, 2008).

Anonymous reporting channels may be particularly useful in encouraging the reporting of wrongdoing by organisational members because anonymity should minimise personal "costs" of reporting, such as retaliation and other potential penalties (Moberly, 2006).

2.8 Whistle Blowing Recipient

Whistle blowing has been defined as "the disclosure by a current or former organisation member of illegal, inefficient, or unethical practices in an organisation to persons or parties who have the power or resources to take action" (Near & Miceli, 1985).

In another definition, whistle blowing has been defined as "the disclosure by members of an organisation (former or current) of illegal, immoral, or illegitimate practices under the control of their employers, to persons or organisations that may be able to effect action" (Near & Miceli, 1995 ; Brody et al., 1998).

Credibility and power of the whistle blowing recipients affect the overall outcome of a whistle blowing incident. Similar with whistle blowers, whistle blowing recipients also make some calculations on whether to act on the reported wrongdoings. They must ascertain whether wrongdoing has really occurred; whether they are responsible for acting, and whether they have the power to change the wrongdoing. When they are powerful enough, complaint-recipients may use "efficacious actions" to address a reported wrongdoing, but only when they support the whistle blower. A powerful whistle blowing complaint-recipient, who is supportive of the whistle blower, enhances the whistle blower's credibility, thus increasing overall whistle blowing effectiveness (Near & Miceli, 1995).

Whistle blowing report is not helpful in uncovering wrongdoing if it is not properly received, investigated, and resolved. A key element in the upstream of the whistle blowing process is the person receiving the report (Hooks et al. 1994).

Some theorists argue that whistle blowing only takes place when the information is placed on record publicly. Dandekar (1991), however, argues that "...managers define whistle blowing to include going outside the normal chain of command even if not actually going public with damaging information". Therefore, the reporting of information can be internal where the whistle blower complaints to people higher up in the organisation or external where it is reported to the media, enforcement agencies or public interest groups (Weiss, 1994). The correct procedure for a whistle blower to

follow is often described as "internal first, law enforcement agencies second, and news media last" (Callahan & Collins, 1992).

Whistle blowers have the option of choosing between internal or external parties (or both) as recipients of whistle blowing (Read & Rama, 2003). There are reasons for distinguishing between internal and external reporting. Internal reporting gives advantages to employers and workers since the employer is given the opportunity to deal with a concern without outside pressure or publicity (Lewis, 2006). Most whistle blowers air their complaints internally because they have faith in the mechanisms for reporting misconduct, such as an anonymous tip line or drop box (Figg, 2000).

Chiasson and Johnson (1995) interviewed accountants in industry regarding their perception of whistle blowing. The results indicated that accountants were willing to report fraud to internal sources but not to regulators. From the worker's point of view, once a matter has been raised externally, they may be seen as an adversary and more likely to suffer retaliation (Lewis, 2006).

Most whistle blowers choose internal parties as the first recipients of their information (Ponemon, 1994; Hooks et al., 1994). Internal auditors are natural outlets for whistle blowers because, as Ponemon (1994) noted:

> ... for purposes of remediation, control, or prevention, an internal channel for communicating wrongdoing is likely to be more effective than an external

channel because the organisation and its management will likely view the external source as a violation of confidentiality and less constructive.

The complaints recipient may possess the power to change the wrongdoings, particularly if the recipient is a high level manager or someone who is in another position that allows greater influence in reporting organisational wrongdoing (such as internal auditor) (Miceli & Near, 1992).

2.8.1 Internal Auditor's Responsibility

If an employee or outsiders claims a wrong doing by the company, the company should conduct an investigation and check if there is any impropriety occurring. The internal auditors as recipients of whistle blowing complaints is responsible to determine if the allegation is true or false (Ponemon, 1994). Determining the truthfulness of the complaints is important because unwarranted complaints and frivolous could have dysfunctional consequences.

In the Global Internal Audit survey 2007 conducted by Ernst & Young, 84 percent of the respondents (internal Audit executives representing 138 public companies from 24 countries) indicated that they are responsible for performing audits on fraud investigation. A survey of more than 125 chief internal auditors by professors at the University of Massachusetts and Bentley College concluded that 76 percent of employees whistle blowing complaints were found to be true (FIGG, 2000).

The IIA Code of Ethics proclaims that Certified Internal Auditors or members of The Institute of Internal Auditors "shall not knowingly be part of any illegal or improper activity" and mentions that auditors have an obligation to the general public. The IIA Professional Standards Bulletin (PSB) 83 to 85 states:

When an internal auditor's procedures lead to suspicion of some kind of wrongdoing, the auditor should determine the possible effects of wrongdoing, discuss the matter with the appropriate level of management, and decide with management who should investigate or otherwise follow up the suspicion. When wrongdoing is suspected, the auditor's responsibility extends to the appropriate level of management within the organisation.

The Treadway Commission (NCFFR, 1987) recommended that top management review its code of conduct regularly to insure its continued relevance to operations, and that the internal auditing review top management's compliance with the code. The internal audit function would prepare a report for the board of directors, disclosing management's adherence to the tenets of the code.

In addition to the Chief Audit Executive (CAE)'s roles of ensuring compliance with internal controls and serving as an information source, audit committees often call on the CAE to be the recipient of whistle blowing reports. A study by Kaplan and Schultz (2006) indicated that in the majority of companies responding the internal audit department had sole responsibility for documenting, investigating, and resolving whistle-blowing reports. Furthermore, CAEs had the responsibility of following up on allegations

from anonymous whistle blowers in 71 percent of the sampled companies (Kaplan & Schultz, 2006).

In the year 2006 survey of the Internal Audit Practice in Malaysia, respondents were of the view that the internal audit function is usually tasked to conduct fraud investigations. This is a reflection of the growing consciousness and the increased focus on the risk of fraudulent practices. In comparison to 2004, there is a greater emphasis on Fraud Investigations in 2006 (39 percent in 2004 and 47 percent in 2006). The involvement of the Internal Audit function in providing assurance on fraud detection and prevention appears to be a natural expectation for the Internal Audit function to lend their skills in risk and control areas (Ernst & Young, 2006). Globally, 84 percent of the internal auditors indicated their responsibility for performing audits on fraud investigation. (Ernst & Young, 2007). As per the earlier study by Ponemon (1994), the responsibilities of the internal auditor are to verify the compliance with the code of conduct and to investigate the truthfulness of the whistle blowing complaints.

2.8.1.1 Internal Auditor's Responsibility and Fraud

Internal auditors can accomplish their mandate under the Professional Practice of Internal Auditing by documenting and testing the effectiveness of controls, which may reduce the likelihood that weak controls will create opportunities for fraud (Murdock, 2008).

Organisations with an internal audit department are more likely to detect and self-report fraud (Coram, Ferguson and Moroney, 2008). Furthermore, organisations that rely solely

on outsourcing for their internal audit function are less likely to detect and self-report fraud than those that undertake at least part of their internal audit function themselves. These findings suggest that internal audit adds value through improving the control and monitoring environment within organisations to detect and self-report fraud (Coram, Ferguson and Moroney, 2008).

Organisations with an internal audit department suffered a median loss of US$118,000, compared with the median loss of US$250,000 in organisations where there was no internal audit department (ACFE, 2008). The impact on fraud losses associated with internal audits was much higher than the impact associated with external audits. Internal auditors generally are full-time employees of the victim organisation, whereas external auditors spend a limited amount of time in a number of different organisations (ACFE, 2004). Organisations that conducted surprise audits suffered a median loss of US$70,000, while those that did not had a median loss of US$207,000 (ACFE, 2008).

Operations audit, fraud auditing and continuous auditing are the various techniques utilised to reduce the direct and indirect costs associated with all forms of fraud. In a study by Bierstaker, Brody and Pacini (2006), auditors were asked to rate the effectiveness of operations audit, fraud auditing and continuous auditing to prevent and detect fraud in their organisation. On a scale from 1 (completely ineffective) to 7 (completely effective), the operations audit, fraud auditing and continuous auditing effectiveness mean were 4.83, 5.28 and 5.35 respectively (Bierstaker, Brody and Pacini, 2006). Therefore, internal auditing responsibilities are reasonably effective in preventing and detecting fraud.

2.8.1.2 Internal Auditor's Responsibility and Whistle Blowing Complaints

Read and Rama (2003) examined whistle blowing complaints received by internal auditors based on survey responses from 129 chief internal auditors of US manufacturing companies. Within the past two years, 71 percent of chief internal auditors received whistle blowing complaints, 65 percent of which were found to be valid upon investigation. The study also shows that whistle blowing complaints receipt was positively associated with internal audit involvement in monitoring compliance with the code of conduct.

2.9 Chapter Summary

This review of the related literature presented a discussion on fraud, the overview of whistle blowing, complaint practices, roles of the internal auditing. The review also focused on the elements of whistle blowing program i.e. policy, communication channel and recipient especially on the relation of the program components to fraud and complaints practice. The chapter also presented literatures focusing on the elements of internal auditing as the whistle blowing recipient.

CHAPTER 3

RESEARCH FRAMEWORK AND METHODOLOGY

3.0 Introduction

This chapter describes the methods and procedures of inquiry that are used in this study. The purposes of this study are to gauge the extent of the receipt of whistle blowing complaints by internal auditing, to determine whether the whistle blowing program is effective in reducing the fraud losses and the effectiveness of the whistle blowing program components that is the policy, communication channel and whistle blowing recipient. This chapter is divided into four sections and they are the research framework, research hypotheses, methodology, and chapter summary.

3.1 Research Framework

The independent variables are derived from SOX (2002); Kaplan and Schultz (2006); (AICPA, 2005); Murdock (2003, 2008) and PriceWaterhouseCoopers, (2003). SOX (2002) requires audit committees to take a role in whistle blowing to reduce corporate fraud while agency theory suggests that internal auditors are agent to audit committee. In this study, internal auditors act as an agent that runs the whistle blowing program for their principal, the audit committees. Kaplan and Schultz (2006) observed that in the majority of companies studied, internal audit had sole responsibility for documenting, investigating and resolving whistle blowing reports. Furthermore, Murdock, (2008) also stated that internal auditors responsibility in documenting and testing the effectiveness of controls may reduce the opportunities for fraud. SOX (2002) also mandate policies and protection for reporting wrongdoing. According to PriceWaterhouseCoopers, (2003)

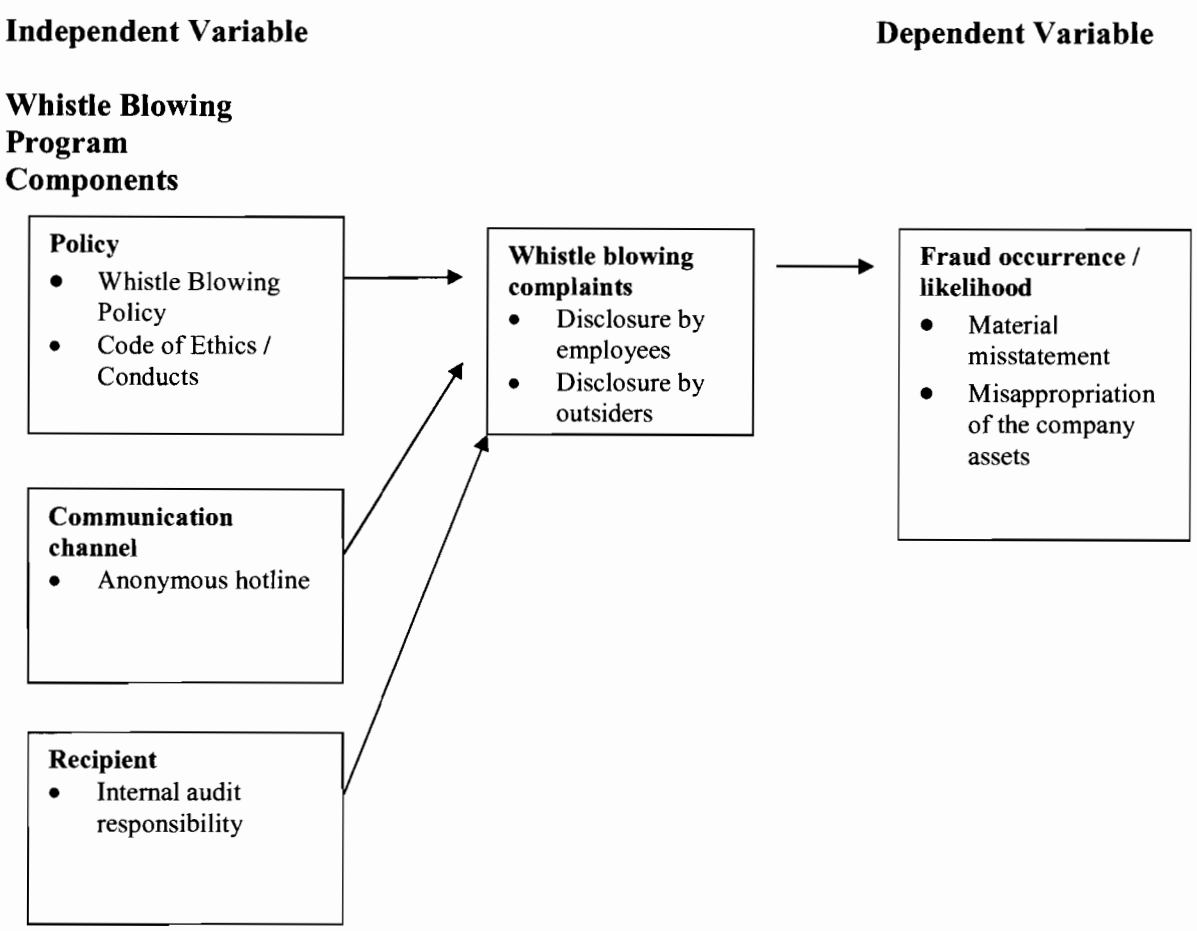
organisations that have suffered from fraud implemented whistle blowing policies while organisations that have not been fraud victims rely more on codes of conduct, while Murdock (2003) suggested that whistle blowing program is included in the code of ethics. SOX (2002) require reporting mechanisms be established for recording, tracking and acting on information provided by employees anonymously and confidentially while AICPA (2005) suggest that to encourage fraud reporting that involves management, anonymous reporting channel is essential.

The mediating variable is the whistle blowing complaints practice derived from Teen & Vasanthi, (2006); Read and Rama, (2003) and Johnson and Wright, (2004). According to Read and Rama (2003) whistle blowing complaints practice was positively associated with internal audit responsibility. Teen and Vasanthi, (2006) highlighted that having a formal whistle blowing policy in place is significant because it encourages more people to complaints on wrongdoings while Johnson and Wright, (2004) suggest that code of ethics is one of the most critical factors influencing the decision to report questionable acts. In addition, Teen and Vasanthi, (2006) suggested that more would whistle blow if they could do so anonymously.

Based on the various literatures mentioned above and agency theory, the independent variable of this study is the whistle blowing policy, communication channel, recipient and the whistle blowing complaint practice is the mediating variable. The fraud occurrence is the dependent variable. The definition of each attribute presented in the framework is

discussed in the following sections. Figure 3.1 below shows the research framework of the study.

***Figure 3.1*: Theoretical Framework**



3.2 Hypotheses

The research hypotheses will examine the receipt of whistle blowing to fraud occurrence. In this study, prior research and literature were used to identify whether the whistle blowing program is effective in reducing the fraud losses and the effectiveness of the whistle blowing tools that is the policy and communication channel.

3.2.1 Whistle Blowing Policy and Fraud

Whistle blowing policy and effective enforcement has the potential to significantly reduce fraudulent activity and also to send a signal that the organisation exercises good corporate governance (Eaton & Akers, 2007).

Well-structured whistle blowing policy is crucial in the fight against fraud (Baker, 2008). Effective whistle blowing policy can help an organisation communicate its ethical practices to its employees and protect itself against fraud (Eaton & Weber, 2008). By issuing a detailed policy, the effect will be to deter any potential wrongdoers thus resulting in reduced losses from any wrongdoing and reduced costs in respect of investigating any wrongdoing (Durant, 2004).

Whistle blowing policy cannot be effective if not communicated to employees, vendors, customers, and shareholders (Eaton & Akers, 2007). Timing is also crucial for an effective whistle blowing policy, therefore, employees should be made aware that the earlier a concern is highlighted, the easier it is to take action and correct the situation (Olander, 2004).

According to PricewaterhouseCoopers (2003) survey, although whistle blowing policy is implemented in most of the companies globally, the effectiveness of the policy differs from one part of the world to another. United States (US) companies are more confident on the effectiveness of the policy than the Western-Europe companies. The survey also shows that whistle blowing accounts for 8 percent of detected fraud (Baker, 2008).

Code of ethic or conducts is implemented in most of the companies globally. EY interviewed nearly 1,200 executives globally about their fraud experiences and on the effectiveness of the code, majority think that it is a useful measure to prevent fraud (Ernst & Young, 2008). Code of ethics or conducts is only effective when it is communicated and enforced consistently throughout the organisation (Rufus & Robert 2004). Organisations with a code of conduct suffered a median loss of US$126,000, compared with the median loss of US$232,000 in organisations where there was no such code (ACFE, 2008).

From the discussion above, hypotheses are as follows:

H1a: The more effective the whistle blowing policy support of the whistle blower, the lower the number of fraud occurrence.

H1b: The more effective the code of ethics or conducts, the lower the number of fraud occurrence

3.2.2 Anonymous Hotline and Fraud

Employee reporting is so critical in the detection of fraud since this mechanism offer a remarkable chance for companies to reduce their fraud exposure (Johnson & Wright, 2004). Most public corporations and many private organisations have implemented a whistle blowing hotline to help curtail fraud loss after the U.S. Sarbanes-Oxley Act of 2002 and UK Combined Code on Corporate Governance were introduced, This may be the most useful aspect of the whole governance reform movement, because an effective hotline is a powerful tool for combating fraud (Slovin, 2006).

Fraud losses are reduced by nearly 60 percent when a hotline is present (ACFE, 2004). Study indicates that 50 percents of tips were communicated through hotlines and it is effective in detecting fraud. Organisations with a hotline suffered a median loss of US$100,000, compared with the median loss of US$250,000 in organisations without (ACFE, 2008).

To encourage fraud reporting that involves management, anonymous reporting is necessary (AICPA, 2005). Hotline is one of the communication channels that ensure confidentiality of the whistle blower (ACFE, 2008). The advantage of anonymous reporting channels is that employees may discover financial statement fraud before others (e.g., internal auditors, external auditors, and/or regulators) and have the ability to inform the organisation earlier than others (Moberly, 2006).

The Ernst and Young survey in 2002 highlighted employees' preference for telephone hotlines as a whistle blowing tool. 57 percent of respondents stated they would use a telephone hotline, 20 percent would write anonymous letter and 16 percent would use anonymous Web site. The perceived ease of tracking Internet Protocol (IP) addresses could be a cause for concern, or it could be that going online is simply less convenient than picking up the phone. Regardless of the reasoning, internal auditors will find the best results are achieved by offering several reporting options to accommodate individual preferences (Slovin, 2006).

From the above argument, hypothesis is as follows:

H2: The more effective the anonymous hotline, the lower the number of fraud occurrence

3.2.3 Internal Audit Responsibility and Fraud

Internal auditor's responsibility in documenting and testing the effectiveness of internal controls may reduce the likelihood that weak controls will create opportunities for fraud (Murdock, 2008). Organisations with an internal audit department are more likely to detect and self-report fraud (Coram, Ferguson and Moroney, 2008). Internal audit adds value through improving the control and monitoring environment within organisations to detect and self-report fraud (Coram et al., 2008). Organisations with an internal audit department suffered lower fraud losses compared with the organisations without an internal audit department (ACFE, 2008).

The impact on fraud losses associated with internal audits was much greater than the impact associated with external audits since internal auditors full-time employees of the victim organisation, whereas external auditors spend a limited amount of time in a number of different organisations (ACFE, 2004). Internal auditors spent more time in the organisations to carry out various audit assignments throughout the year, for example operations audit, IT audit, credit audit, risk assessments while external auditors typically came in during the year end financial closing to conduct financial audit.

Operations audit, fraud auditing and continuous auditing are the various techniques utilised by internal auditors to reduce the direct and indirect costs associated with all forms of fraud (Bierstaker, Brody and Pacini, 2006). In addition, organisations that conducted surprise audits suffered lower losses compared to those that did not (ACFE, 2008).

From the above argument, hypothesis is as follows:

H3: The more the responsibilities of the internal audit, the lower the number of fraud occurrence.

3.2.4 Whistle Blowing Complaints Practice

Most fraud goes undetected because employees fear the consequences of blowing the whistle through the communication channels. They do not feel that they can trust the recipient that they have to report the fraud to and they may be victimised. They also do not believe that the information provided will remain anonymous and confidential. Therefore, in order to encourage the whistle blowers to report wrongdoing and reduce fraud, proper whistle blowing program components should be in place that is the whistle blowing policy, communication channel and independent recipient.

Organisations can encourage people to make their worries known by establishing formal whistle blowing policy (Baker, 2008). CPA Australia Corporate Governance and Financial Reporting Centre (CGFRC) 2006 survey indicated that more respondents are willing to whistle blow if there is a whistle blowing policy. This finding supports the

value of having a formal policy in place because it significantly encourages people to blow the whistle (Teen & Vasanthi, 2006). Whistle blowing policy is intended to encourage and allow employees and others to raise serious concerns within the company rather than seeking resolution outside the company. (Olander, 2004). Robust whistle blowing policy might discourage potential whistle blowers from approaching the press as a first resort (Durant, 2004). One of the most significant factors influencing an employee's decision to report questionable acts is the existence of a comprehensive ethics code in the organisation and regular employee training with respect to that code (Johnson & Wright, 2004).

To encourage whistle blowing, the distance that the communication must travel and the links it must go through needs to be minimised. Reporting process must be in place and employees must know about the process is and how to use it, In addition, the reporting process should provide maximum assurance of confidentiality, integrity, and safety from retribution (Johnson & Wright, 2004). To encourage whistle blowing, a whistle blowing procedure should assure that the organisation will protect the identity of those who raise the complaints and do not want their name disclosed. (Lewis, 2006). More employees would whistle blow if they could do so anonymously, according to the CPA Australia Corporate Governance and Financial Reporting Centre (CGFRC) 2006 survey of their members (Teen & Vasanthi, 2006). National Bureau of Economics Research (NBER) finds that there are severe disincentives to report fraud using non-anonymous channels i.e. employees who blew the whistle had lost their job, quit under duress, or lost significant job responsibilities (Dyck et al., 2007). According to a 2002 study sponsored

by Ernst and Young, respondents are more likely to report fraud if they could remain anonymous. One possible reason for the need to remain anonymous is the fear of retaliation (Slovin, 2006). Anonymous reporting channels may be useful in encouraging the reporting of wrongdoing by organisational members because anonymity minimise personal "costs" of reporting, such as retaliation and other potential penalties (Moberly, 2006). Employees will be less fearful of retaliation and more likely to express concerns with an existence of a specific, formal channel for reporting. For greatest impact, the reporting channels should allow anonymous communication (Lachman, 2008).

Credibility and power of complaint recipients affect the overall outcome of a whistle blowing incident (Near & Miceli, 1995). In addition, the codes of conduct have little impact if top management does not reinforce them by actions (Ponemon, 1994). Internal audit function is a natural choice for reviewing compliance with code of conduct. Whistle blower is more likely to report wrongdoing if the internal auditing is responsible for monitoring compliance with a corporate code of conduct (Read & Rama, 2003).

Whistle blowing is still the most effective mechanism to detect fraud (KPMG, 2008). Fraud is considered attractive when the fraud detection is low. A well-defined and protected channel for reporting suspicions of fraud facilitates whistle blowing and can lead to early detection of fraud (KPMG, 2004) while delay in detecting fraud can lead to a build-up of financial losses, reputation damage and financial restatement. According to PricewaterhouseCoopers (2003) survey, whistle blowing accounts for 8 percent of detected fraud globally (Baker, 2008). AFCE reported that the percentage of frauds

detected in the US organisations by whistle blowing was a 40 percent in 2004 (Verschoor, 2005). By encouraging corporate whistle blowing, more fraud can be detected and the occurrence of fraud could be decreased. By providing protection via the policies, anonymous communication channel, independent recipient, the number of whistle blower coming forward could be increased. Hotlines repeatedly have proven their ability to detect and deter illegal behavior. Fraud losses are reduced by nearly 60 percent when a whistle blowing hotline is present (AFCE, 2004). Fraud is discovered via whistle blowing tips 40 percent of the time, which ranked tips as the number one method of fraud detection (Slovin, 2006). The increase in whistle blowing suggests that people perceive the risk of being caught of committing fraud has increased. Whistle blowing increases the chances of fraud detection, and thus it acts as a deterrent to the occurrence of fraud. Therefore, the greater the number of the complaint received, the lower the number of fraud occurrence will be.

From the above arguments, hypotheses are as follows:

H4a: Whistle blowing complaints practice mediate the relationship between the policy of whistle blowing and fraud occurrence that is the greater the extent of policy of whistle blowing, the greater will be the whistle blowing complaints practice be, leading to lower number of fraud occurrence.

H4b: Whistle blowing complaints practice mediate the relationship between the communication channel and fraud occurrence that is the greater the extent of the anonymous hotline, the greater will be the whistle blowing complaints practice be, leading to lower number of fraud occurrence.

H4c: Whistle blowing complaints practice mediate the relationship between the internal audit responsibility and fraud occurrence that is the greater the extent of internal audit responsibility, the greater will be the whistle blowing complaints practice be, leading to lower number of fraud occurrence.

3.3 Methodology

3.3.1 Research Design

The basic research design utilised for this study was a survey design. The collection of primary data was accomplished through the use of a mail survey instrument. Data collected from the mail survey instrument (questionnaire) are divided into two components. The first component of the questionnaire contained the respondent details. The second component is split into five parts which include questions about the fraud history and the receipt of whistle blowing, whistle blowing policy, whistle blowing communication channel, the internal audit responsibilities.

3.3.2 Sample and Data Collection

a. Sample

The population used in this study is all of the companies listed in the Bursa Malaysia Stock Exchange in 2008. The total number of companies for the year ended 2008 is 855. The year 2008 was chosen due to the availability of the data and the current status of the data. The firms selected were from the companies listed on the Main Board and the Second Board of the Bursa Malaysia Berhad

(BMB). Hair et al. (1998) suggested that as a general rule, the minimum sample size is to have at least five times as many observations as there are variables to be analysed. The more acceptable size would have a ten-to-one ratio. The present study has five variables, and therefore the minimum sample size needed was 25 (5 times 5 variables) or preferably 50 observations (10 times 5 variables). The data related to the variables were collected from a group of chief audit executive (or chief internal auditors) using mailed survey questionnaire.

b. Sampling Techniques

This study focused on the Malaysian public listed companies (Bursa Malaysia) for the year 2008.

c. Data Collection

Primary data are used in this research. Primary data are collected by using mailed questionnaire to obtain chief audit executive perspectives concerning the role of internal auditors in whistle blowing program to reduce corporate fraud.

d. Unit of Analysis

The unit of analysis defined in this study is the internal audit department.

e. Respondents

Chief audit executives are used as the respondents for questionnaire shown in Appendix A because the author would like this study to be consistent with other studies.

3.3.3 Research Instrument

Prior to the questionnaires, the attributes of fraud, whistle blowing complaint practice, whistle blowing policy, whistle blowing communication channel and the whistle blowing recipient were identified through the literature review in Chapter 2.

The survey questionnaire was developed based on combination of several previous survey questionnaires related to fraud and whistle blowing adapted from:

- Read and Rama (2003)
- IIA Whistleblower Complaint Reporting Practices (Millage, 2008).
- KPMG Fraud Survey Report (KPMG, 2004)
- AICPA Tools for Audit Committee: Anonymous Submission of Suspected Wrongdoing (Whistle blowers), 2005

Before utilising the survey instrument, a pilot study was conducted using a sample of 30 internal auditors from various companies. The researcher e-mailed the questionnaire and asked the respondents on any difficulties faced when

completing the questionnaire in terms of wording and comprehensiveness in terms of the choices of answer given.

The instrument used for this research is the mailed survey questionnaire as attached in Appendix A. After obtaining the all the attributes and completing the pilot test, the questionnaires were designed to obtain the primary data pertaining to:

1. Fraud (Part 1)
2. Whistle Blowing Complaints Practice (Part 2)
3. Policy (Part 3)
4. Whistle Blowing Communication Channel (Part 4)
5. Whistle Blowing Recipient (Part 5)

Appendix A shows an example of the questionnaire that sent to the CAE (Head of the Internal Audit Department). The CAE were asked to indicate, on a five-point scale, the opinion they place on each of the items pertaining to the policy, communication channel and recipient. The attributes serving as the bases for the items in this scale were:

1. Whistle Blowing Policy = Part 3, items 1-4.
2. Code of Ethics / Conduct = Part 3, items 5-8.
3. Communication Channel = Part 4, items 1-8
4. Internal Audit's Responsibility = Part 5, items 1-5

The points were: (1) Strongly Disagree; (2) Disagree; (3) Neither agree nor disagree; (4) Agree; and (5) Strongly Agree.

3.3.4 Operationalisation of Variables

For the dependant variables, the Statement on Auditing Standards two fraud categories that are fraudulent financial reporting and misappropriation of assets were used in this study. The independent variables in this study are the attributes of policies, communication channel and recipient. The mediating variable in this study is the complaints practice. Table 3.1 below summaries the variables and dimensions used to operationalise the variables.

Table 3.1
Summaries of Variables and Dimensions

Variable	Dimensions
Fraud	Fraudulent financial reporting Misappropriation of assets
Policies	Whistle Blowing Poliy Code of Ethics
Communication Channel	Anonymous Hotline
Recipient	Internal Audit's Responsibility
Complaints Practice	Internal Whistle Blowing External Whistle Blowing

3.3.5 Measurement of the Variables

All variables included in this study were measured using multiple items drawn from previous research. The independent variables in this study are the attributes of effective whistle blowing program components: policy, code of ethics, anonymous hotline and internal audit responsibility. To ensure consistency among the independent variables and to avoid confusion among respondents, all the items were measured using one to five–point Likert scale. The following attributes are used in the measurements of the independent variables:

a. Whistle Blowing Policy:

- For effectiveness of whistle blowing policy, it should be communicated to employees, vendors, customers, and shareholders (Eaton & Akers, 2007).
- Well-structured whistle blowing policy is essential in the fight against fraud (Baker, 2008).
- SOX (2002) mandates whistle blowing policy and protection for employees reporting wrongdoing.

b. Code of Ethics:

- Code of ethics is effective when it is communicated and enforced consistently throughout the organisation. (Rufus & Robert 2004)
- The existence of a comprehensive ethics code in the organisation and regular employee training will influence the employee decision to report wrongdoings (Johnson & Wright, 2004).

c. Anonymous Hotline:

- For an effective hotline, AICPA suggested staffing the hotline 24 by 7 with trained interviewers, protecting confidentiality and avoid any means that can track the communication (Slovin, 2006).
- SOX (2002) mandate developing reporting mechanisms for recording of information provided by employees anonymously.
- The best results are achieved by offering several reporting options to accommodate individual preferences (Slovin, 2006).

d. Internal Audit's Responsibility:

- The responsibilities of the internal auditor are to verify the compliance with the code of conduct and to investigate the truthfulness of the whistle blowing complaints. (Ponemon, 1994)
- Internal audit department had sole responsibility for documenting, investigating, and resolving whistle-blowing reports (Kaplan & Schultz 2006).
- Internal auditors are responsible for performing audits on fraud investigation. (Ernst & Young, 2007)
- Internal audit review of internal controls may reduce the likelihood that weak controls will create opportunities for fraud (Murdock, 2008).

The mediating variable in this study is the whistle blowing complaints practice. The measurement of the whistle blowing complaints practice is adapted from Read and Rama (2003) and IIA Whistleblower Complaint Reporting Practices Survey 2005. This measurement comprises of the number of whistle blowing complaints received over the past two years.

The dependent variable in this study is the fraud occurrence. For the purpose of this study, quantitative measurement will be used, that is, the fraud losses over the past 2 years. For the measurements, the item will be based on the KPMG Malaysia Fraud Survey (2004).

In summary, the measurement of variables was obtained from the various questionnaires as per Table 3.2 below:

Table 3.2
Summaries of Variables Measurement

Variables	Measurement	Reference / Source
Fraud	Financial losses in Ringgit Malaysia (RM) over the past 2 years	KPMG Malaysia Fraud Survey 2004
Whistle Blowing Policies	Comprehensiveness Communication Training	Eaton and Akers, (2007) Olander (2004)
Communication Channel	Staffing Accessibility Confidentiality	Slovin (2006) AICPA Tools for Audit Committee: Anonymous Submission of Suspected Wrongdoing (Whistleblowers), 2005
Whistle Blowing Recipient	Compliance review Investigation	Read and Rama (2003)
Whistle Blowing Complaints Practice	Complaints received over the past 2 years	Read and Rama (2003) IIA Whistleblower Complaint Reporting Practices Survey 2005

3.3.6 Method of Data Analysis

This study used both descriptive and inferential analyses.

3.3.6.1 Descriptive Analysis

To acquire a feel for the data, descriptive statistics (mean values and standard deviations) for all the variables of interest were obtained. The purpose of descriptive analysis was to present raw data transformed into a form that will make them easy to understand and interpret. This analysis is used to determine the percentage of internal auditors responsible for the whistle blowing program, the fraud losses and the receipt of whistle blowing complaints.

3.3.6.2 Inferential Analysis

a) Factor Analysis

Factor analysis is used to test the factors for sample proportions. This is because factor analysis helps to reduce a vast number of variables to a meaningful, interpretable, and manageable set of factors (Sekaran, 1999). It also shows revealing patterns of interrelationships among variables, detecting clusters of variables and reducing a large number of variables to a smaller number of statistically uncorrelated variables, the factors of factor analysis, that are each linearly related to the original variables (Agresti & Finlay, 1997). This procedure is often used in inferential research and is robust enough to deter type-one errors (Ferguson, 1998). The 95 percent confidence level is significant for this study.

It should be noted that as with any research initiative, the investigator had no control of how data distributions looked once data was collected. It is hoped the data will be relatively "normally distributed" with equal variance. These are basic assumptions for "parametric statistics". However, if descriptive analyses revealed large skewing of data, it will be necessary to revert to other procedures. If this becomes necessary, "non-parametric" tests will be employed. This method of analysis is recommended in situations such as this (Moore & McCabe, 1993).

b) Test of Reliability of the Instrument

Reliability of the instrument indicates the extent to which treatment variables capture the construct intended to be measured. The reliability of the instrument used in this study is

tested using Cronbach's Alpha available through the SPSS 11.0.1 model (SPSS-11.0.1 User's Guide, 2001). Reliability analysis will be conducted on the factors extracted using the recommendation of Hair et al. (2002). It is used to test the internal consistency of the measurement instruments.

c) Correlation Analysis

Pearson correlation was used to describe the strength and direction of the relationship between two variables. In this study, the relationship between whistle blowing program components and fraud occurrence as well as between complaints practice and fraud occurrence were examined using this analysis. A positive correlation indicates that as one variable increases, so does the other. A negative correlation indicates that as one variable increases, the other decreases.

A perfect correlation of 1, or –1 indicates that the value of one variable can be determined exactly by knowing the value of the other variable. On the other hand, a correlation of 0 indicates no relationship between the two variables.

d) Multiple Regression

Multiple regression is a more sophisticated extension of correlation and is used to explore the predictive ability of a set of independent variables on one dependent variable (Pallant, 2001).

In order to test the hypotheses developed in the present study, multiple regression analyses were conducted. Besides that, the amount of variance of fraud occurrence explained by the independent variables was also examined through this analysis.

Before proceeding with the analysis, basic assumptions of the linearity (represents the degree to which the change in the dependent variable is associated with the independent variable), normality of the error terms distribution, and homoscedasticity (constant variance of the error terms) were first examined.

Before the regression results are considered valid, the degree of multicollinearity and its effect on the results are examined. Therefore, the variance inflation factor (VIF) and the condition indices for all the variables were examined. According to Hair et al. (1998), the VIF should be closed to 1.00 to indicates little or no multicollinearity. They further suggested the cutoff value of 10.00 as an acceptable VIF.

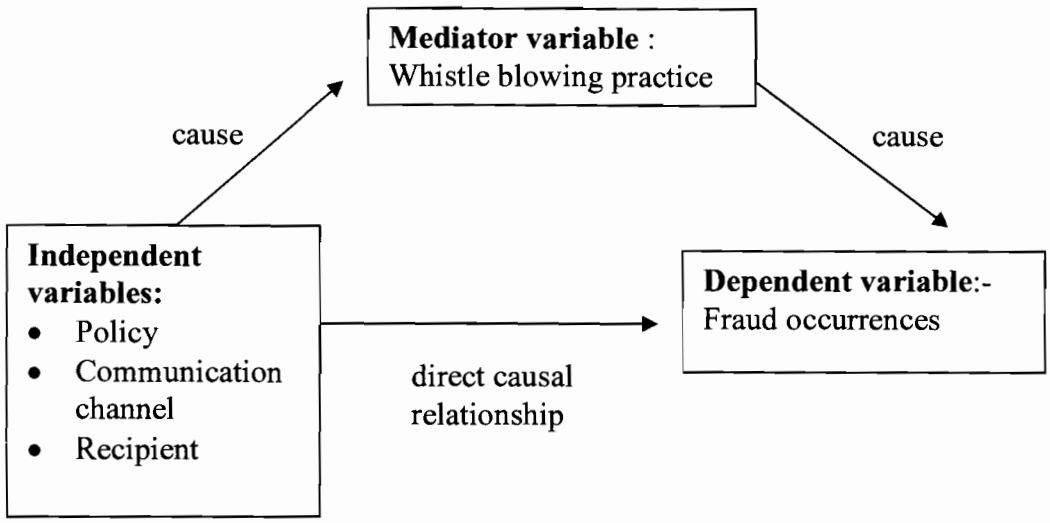
e) Mediation Analysis

In terms of statistics, this study utilise a mediation model, that is one that seeks to identify and explicate the mechanism that underlies an observed relationship between an independent variable and a dependent variable via the inclusion of a third explanatory variable, known as a mediator variable.

Besides hypothesising a direct causal relationship between the independent variable and the dependent variable, a mediation model also hypothesises that the independent

variable causes the mediator variable, which in turn causes the dependent variable. The mediator variable serves to clarify the nature of the relationship between the independent and dependent variables.

***Figure 3.2*: Mediation Model**



Full mediator occurs when an independent variable causes the mediator variable and the mediator variable causes the dependent variable.

Partial mediator occurs when an independent variable causes the mediator variable and the dependent variable; and the mediator variable causes the dependent variable.

Mediation analysis uses the estimates and standard errors from the following regression equations (MacKinnon, 1994):

Table 3.3
Mediation Analysis Regression Equation

$Y = c\,X + e_1$	The independent variable (X) causes the outcome variable (Y)
$M = a\,X + e_2$	The independent variable (X) causes the mediator variable (M)
$Y = c'\,X + bM + e_3$	The mediator (M) causes the outcome variable (Y) when controlling for the independent variable (X). This must be true.

If the effect of X on Y is zero when the mediator is included ($c' = 0$), there is evidence for mediation (Judd & Kenny, 1981a, 1981b). This would be *full* mediation.

If the effect of X on Y is reduced when the mediator is included ($c' < c$), then the direct effect is said to be *partially* mediated.

3.4 Chapter Summary

Past literature and research have identified the attributes of the receipts of whistle blowing by the internal auditing. This research made use of survey instruments to provide additional insight into these findings. Data of the whistle blowing receipts are collected with regard to the complaints by the employees and outsiders. Data are also collected on the effectiveness of whistleblowing policy, communication channel, recipient to examine their effectiveness in encouraging whistleblowing practice and reducing fraud.

CHAPTER 4

ANALYSIS AND FINDINGS

4.0 Introduction

The objective of this chapter is to present the results of the data analysis that relates to the topic under investigation: Whistle-Blowing to Internal Auditors in Malaysia. This chapter will cover descriptive as well as inferential statistics relevant to the purpose of this study.

The basic function of this chapter is to provide information on the data analysis. Following the introduction, the response rates and the demographic profiles are first discussed. This is followed by the factor analysis for the whistle blowing policy, code of ethics, communication channel, the internal auditor's responsibility and a discussion of the tests performed to demonstrate the internal validity of the instrument and establish subject response consistency. The tests of the research hypotheses using descriptive and inferential analyses are then discussed. The summary will bring together and summarise the activities and procedures deliberated in this chapter.

4.1 Responses

The subject used in this study was practising Chief Audit Executive (Head of Internal Audit) of the Bursa Malaysia Listed Companies. Instrument used is the questionnaire on: Whistle-Blowing to Internal Auditors in Malaysia which was mailed to the respective companies.

Table 4.1a shows information on sampling and return rates of the questionnaires sent to the Chief Audit Executive of the Bursa Malaysia listed companies. Of the 805

questionnaires mailed, 643 subjects were contacted but only 213 responses were received resulting in a response rate of 33.13%. 162 surveys were undelivered because either the firms had relocated the corporate offices to other buildings or absence of in-house internal audit functions since the firms had outsourced its internal auditing function to the accounting or external audit firms.

Table 4.1a
Summary of Response Rates

Questionnaires mailed	805
Undelivered	162
Subjects contacted	643
No. of Responses	213
Response rates (213 / 643)	33.13%

Certain demographic information was gathered from each subject. Although the data collected not to address a specific research question, it provides an insight into the subjects and may assist in interpreting results of the analysis. The demographic variables are: qualification, professional accounting and/or auditing qualification, type of business under Bursa Malaysia listing.

Summaries of the demographic data collected from the Chief Audit Executives are shown in Table 4.1b.

Table 4.1b

Summary of Demographic Data on Respondents from Chief Audit Executives

Demographic	Characteristics	Frequency	Percent
Qualification (excluding professional)	First degree	210	98.6
	Post graduate	43	20.2
	Diploma	24	11.3
	Certificate	4	1.9
Professional Accounting/ Auditing qualification	Professional qualifications (CPA Aust., CACA, ACCA, MICPA, CIMA).	43	20.2
	No professional Qualifications	170	79.8
Type of business of the company under KLSE Listing	Trading	45	21.1
	Industrial Products	57	26.8
	Consumer Products	30	14.1
	Properties	15	7.0
	Finance	13	6.1
	Construction	16	7.5
	Plantation	7	3.3
	Technology	20	9.4
	Hotels	3	1.4
	Mining	2	0.9
	Trust	2	0.9
	Infrastructure	3	1.4

About 98.6% (210) of the respondents hold a first degree in accounting/related discipline, 20.2% (43) are post-graduates, 11.3% (24) are diploma holders and 1.9% (4) are certificate holders.

20.2% (43) of the respondents have professional qualifications from various professional bodies such as CPA Australia, CACA, ACCA, MICPA and CIMA while 79.8% (170) do not have any professional qualifications.

21% (45) of the respondents are from trading/services companies, 26.8% (57) industrial products, 14.1% (30) are from consumer products, 7% (15) properties and the rest are from finance 6.1% (13), construction (7.5%) (16), plantation (3.3%) (7), technology (9.4%) (20), hotels (1.4%) (3), mining and trust (0.9%) (2) and infrastructure (1.4%) (3).

Table 4.1c

Demographic Data on Primary Party Responsible for Whistle Blowing Program

Primary Party Responsible for Whistle Blowing Program	**Number (%)**
Internal Audit	36 (16.9%)
Human Resource	3 (1.4%)
Others	2 (0.9%)

On the question of primary party responsible for the whistle blowing, 16.9% (36) of respondents states that Internal Audit is responsible for the program, 1.4% (3) states that Human Resource is responsible for the program and 0.9% (2) of the respondents states that other parties are responsible for the program. Table 4.1d further analyses the primary party responsible for the whistle blowing program according to the type of business of the company under Bursa Malaysia listing.

Table 4.1d

Primary Party Responsible for Whistle Blowing Program According to Type of Business

Type of Business of the Company Under Bursa Malaysia Listing	**Internal Audit**	**None**	**Human Resources**	**Others**
Construction	2	14		
Consumer products	3	27		
Finance	5	6	2	
Hotels	0	3		
Industrial products	3	54		
Infrastructure	1	1		1
Mining	1	1		

Type of Business of the Company Under Bursa Malaysia Listing	Internal Audit	None	Human Resources	Others
Plantation	2	5		
Properties	2	13		
Technology	1	17	1	1
Trading/Services	15	30		
Trust	1	1		
TOTAL	**36**	**172**	**3**	**2**

4.2 Goodness of Data

4.2.1 Factor Analysis

Factor analysis is one of the important steps in data analysis, primarily meant to understand the underlying dimensions or proposed dimensionality of variables in a proposed model or relationships in empirical research (Hair, Anderson, Tatham and Black, 2002). The following sections discuss the results of factor analysis using principal components with varimax rotation methods. The criteria used to identify the factors are that eigenvalue must be greater than 1 and that they each have at least 1 item to ensure stability. Factor analysis of the 21 items making up the 100% extracted 5 factors with eigenvalue of 1 or more, which jointly explained 80.16 of the variations in the items. All five factors were retained.

Table 4.2a
Principal-Components Analysis for Whistle Blowing Program

Factor	Eigenvalue	Percentage of Variance	Cumulative Percentage
1	8.827	42.03	42.03
2	2.920	13.91	55.94
3	2.457	11.70	67.64
4	1.470	6.99	74.64
5	1.160	5.52	80.16

Table 4.2a summarises the five factor loadings after varimax with Kaiser normalisation rotation, the items loading greater than 0.35 on each factor, and the percentage of variance explained by each factor. In this study, the "cut-off" point chosen for significant loading is 0.40 and above as suggested by Hair et al. (2006) for a sample of 200.

The results of the Factor Analysis is displayed in Appendix B, under the Rotated Component Matrix using Varimax Kaiser normalisation rotation method which shows the factor loading for each variable. The first factor is dominated by questions relating to the respondents view on the whistle blowing policy in their organisation. Items POLICY1, POLICY2, POLICY3 and POLICY4 loaded strongly on factor 1 and these 4 factors describe information about whistle blowing policy. Accordingly, the factor is named as Whistle Blowing Policy. The second factor is dominated by questions relating to respondents view on the confidentiality of the communication channel. Items CC1 and CC2 loaded strongly on factor 2 and therefore it is labelled as Anonymous Hotline. The third factor, named as Code of Ethics, contains questions related to the respondents view on the code of ethics in their organisation. Items CODE1, CODE2, CODE3 and CODE4 loaded strongly on factor 3. The fourth factor is related to respondent view on internal auditors' responsibility in their organisation. Items IA3 and IA4 loaded strongly on factor 4, therefore labelled as Internal Audit's Responsibility. The fifth factor deals with respondents' view about the staffing of the communication channel. Items CC5 and CC6 loaded strongly on factor 5, therefore named as Hotline Staffing.

Table 4.2b summarised the five factor loadings and the items for the whistle blowing program components.

Table 4.2b
Factor Loadings of Whistle Blowing Program

Factor	Title and Items Loading greater than 0.35	Loading	Percentage of variance
1	**Whistle Blowing Policy**		42.03
	a. The whistle blowing policy provides sufficient protection of the whistle blower	0.516	
	b. The whistle blowing policy is comprehensive and encourages reporting of wrongdoing	0.811	
	c. The whistle blowing policy is adequately communicated and well distributed	0.852	
	d. The whistle blowing policy awareness program is conducted regularly.	0.598	
2	**Anonymous Hotline**		13.91
	a. The communication channel provides anonymous reporting of wrongdoing.	0.878	
	b. The communication channel recipient cannot easily trace the whistle blower identity or location.	0.877	
3	**Code of Ethics**		11.70
	a. The code of ethics is comprehensive and encourages reporting of wrongdoing	0.690	
	b. The code of ethics is adequately communicated and well distributed	0.741	
	c. All employees need to acknowledge and sign-off their compliance with the code of ethics regularly	0.733	
	d. The code of ethics awareness program is conducted regularly	0.871	
4	**Internal Audit's Responsibility**		6.99
	a. Internal audit is responsible for reviewing compliance with company policies and procedures.	0.941	
	b. Internal audit is responsible for reviewing compliance with the external rules and regulation.	0.939	

Factor	Title and Items Loading greater than 0.35	Loading	Percentage of variance
5	**Hotline Staffing**		5.52
	a. The communication channel is staffed by expert staff.	0.869	
	b. The communication channel is staffed by qualified internal staff.	0.845	

All the five factors are named accordingly to their descriptions where the first factor consists of four items that describe information about whistle blowing policy, accounting for 42.03% of the total variance. The second factor consists of two items that describe information about the anonymous hotline, accounting for 13.91% of the total variance. The third factor consists of three items regarding the code of ethics, accounting for 11.70% of the total variance. The fourth factor is "internal audit's responsibility" and it contains two items, accounting for 6.99% of the total variance. The fifth factor is "hotline staffing" and it has two items. Its percentage of variance accounted for 5.52% of the total variance. The fifth factor is assigned by the researcher after the factor analysis.

4.3 Test of Reliability of the Instrument

The reliability of the instrument used in this study was tested using Cronbach's Alpha using the SPSS 17 model. For the purpose of this study, a minimum reliability (i.e. Cronbach's Alpha) of 0.50 was set as suggested by Hair et al. (2002).

Table 4.3a represents the result of the reliability test for each of the whistle blowing program.

Table 4.3a
Test of Reliability of Data:
Whistle Blowing Program

Whistle Blowing Program Item	No. of Items	No. of Items Deleted	Cronbach's Alpha
Whistle Blowing Policy	4	0	0.817
Anonymous Hotline	4	2	0.942
Code of Ethics	4	0	0.825
Internal Audit Responsibility	5	3	0.955
Hotline Staffing	4	2	0.972

The Cronbach's Alpha Values ranges from 0.82 to 0.97. All the factors (Factor 1 to factor 5) fulfilled the minimum requirement level of reliability.

4.4 Descriptive Statistics

4.4.1 The Extent of Whistle Blowing Complaints

The first research objective seeks to determine the extent of the genuine whistle-blowing complaints received by internal auditors from the employees and outsiders. Table 4.4a represents the summary of the results.

Table 4.4a
The Extent of Whistle Blowing Complaints

Number of complaints	Internal	External
More than 20 genuine whistle blowing complaints	7 (3.29%)	2 (0.94%)
15 to 20 genuine whistle blowing complaints	5 (2.35%)	2 (0.94%)
10 to 14 genuine whistle blowing complaints	4 (1.88%)	4 (1.88%)
5 to 9 genuine whistle blowing complaints	8 (3.76%)	6 (2.82%)
Less than 5 genuine whistle blowing complaints	15 (7.04%)	15 (7.04%)
Not Applicable (not responsible for receiving complaints)	174 (81.69%)	184 (86.38%)

From the above results, 81.69 percent of the chief audit executive states that the internal audit functions at their organisation are not responsible for receiving the whistle blowing complaints from internal whistle blower and 86.38 percent of the internal audit functions are not responsible for receiving the whistle blowing complaints from external whistle blower. Table 4.1c also shows that majority of the internal audit function are not responsible for receiving the whistle blowing complaints. For the internal audit functions that are responsible for receiving the complaints, the percentages of complaints received are relatively low.

Table 4.4b and 4.4c summaries the estimated fraud losses according to the types of fraud in the surveyed Malaysian listed companies.

Table 4.4b
Estimated Fraud Losses Due To Misuse of Company Assets

Estimated fraud losses due to misuse of company assets over the past two years	**Number (%)**
Above RM1 million	26 (12%)
RM 500,001 to RM1 million	12 (6%)
RM 100,001 to RM 500,000	32 (15%)
RM 10,001 to RM 100,000	39 (18%)
Below RM 10,001	43 (20%)
Not Disclosed	61 (29%)

In terms of misappropriation of assets, 12 percent of companies surveyed suffered total losses in excess of RM1 million, 6 percent suffered losses between RM500,001 to RM1 million, 15 percent suffered losses between RM100,001 to RM500,000, 18 percent suffered losses between RM10,001 to RM100,000 and 20 percent suffered up to RM 10,000 to losses over the past two years period.

Table 4.4c
Estimated Fraud Losses Due To Fraudulent Financial Reporting

Estimated fraud losses due to fraudulent financial reporting over the past two years	**Number (%)**
Above RM1 million	12 (6%)
RM 500,001 to RM1 million	17 (8%)
RM 100,001 to RM 500,000	11 (5%)
RM 10,001 to RM 100,000	34 (16%)
Below RM 10,001	78 (36%)
Not Disclosed	61 (29%)

In terms of fraudulent financial reporting, 6 percent of companies surveyed suffered total losses in excess of RM1 million, 8 percent suffered losses between RM500,001 to RM1 million, 5 percent suffered losses between RM100,001 to RM500,000, 16 percent suffered losses between RM10,001 to RM100,000 and 36 percent suffered up to RM 10,000 to losses over the past two years period.

Figure 4.4 a:
Estimated Losses According to the Types of Fraud

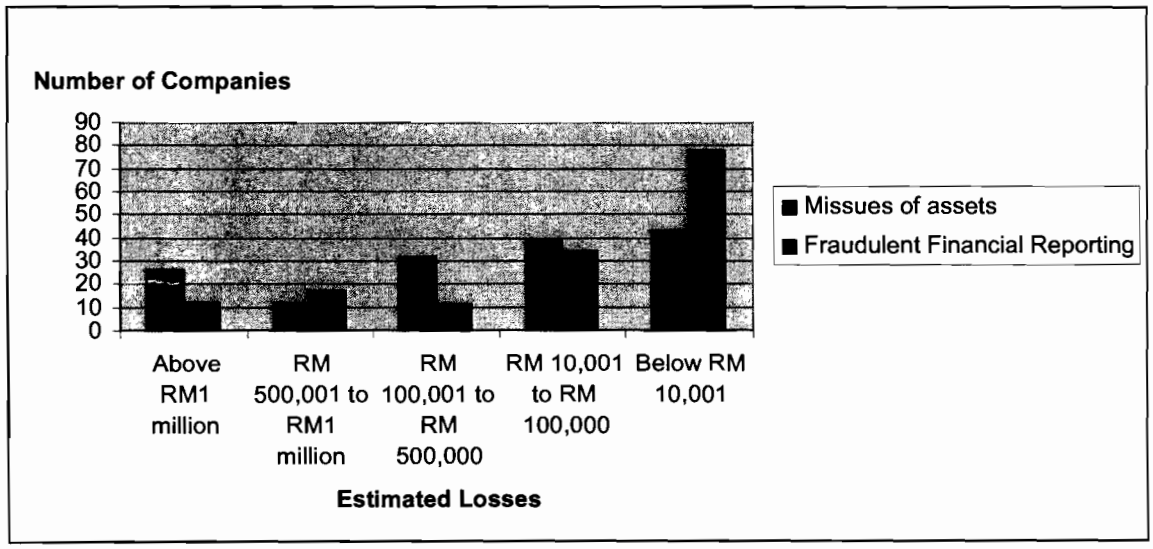


Figure 4.4 b and Figure 4.4 c compares the losses between the internal audit functions that are responsible for whistle blowing program with those that are not.

Figure 4.4 b:
Estimated Losses Due to Misuse of Assets

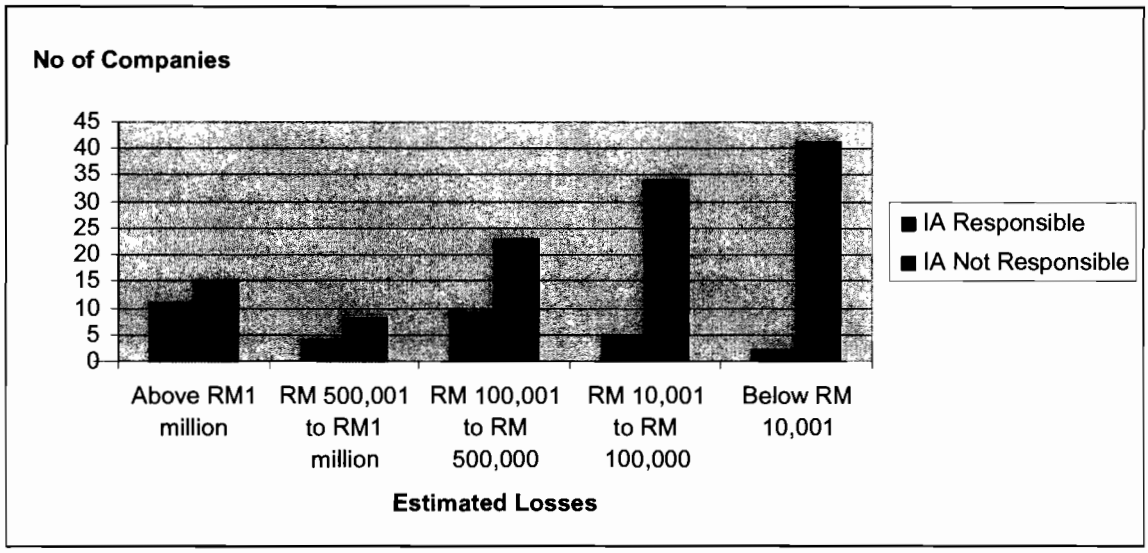
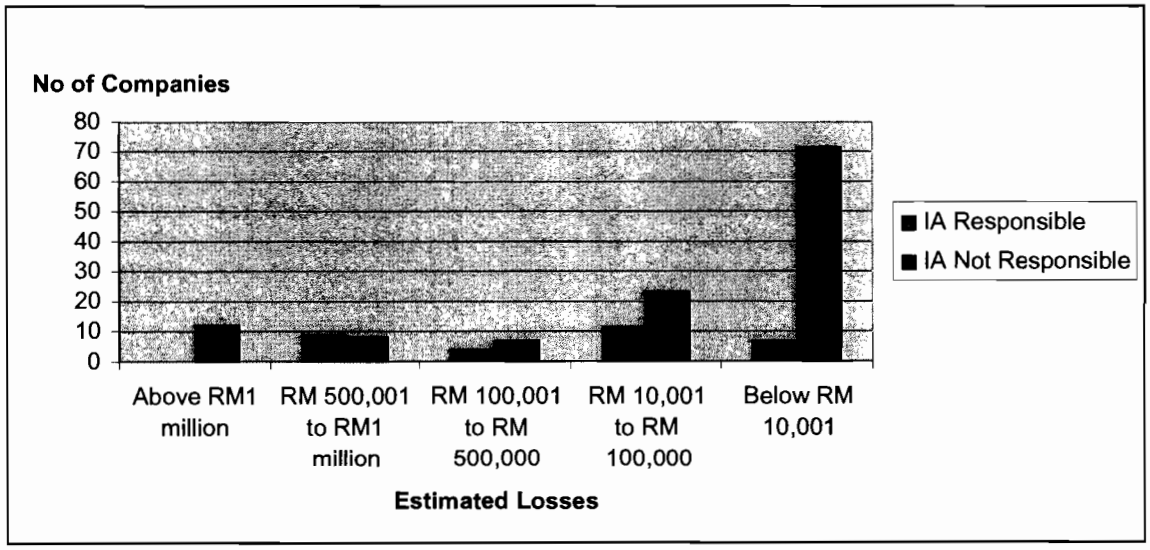


Figure 4.4 c:
Estimated Losses Due to Fraudulent Financial Reporting



4.4.2 The Effectiveness of Whistle Blowing Program

Based on the data from the questionnaire, the mean score was calculated for each item to see how the Chief Audit Executive perceived the effectiveness of the whistle blowing program.

Table 4.4d
Means Scores of the Whistle Blowing Program From the Chief Audit Executive's Perspectives

Rank	Item	Mean	Standard Deviation
1	Whistle Blowing Policy	3.15	0.56
2	Anonymous Hotline	2.96	0.75
3	Code of Ethics	3.57	0.64
4	Internal Audit Responsibility	4.13	0.68
5	Hotline Staffing	3.06	0.35

Table 4.4d presents the mean results of the effectiveness of the whistle blowing program items. From the results, it is observed that, 'Internal Audit Responsibility' is a highly rated item of whistle blowing program from the perspective of Chief Audit Executive with a mean of 4.13 while the least rated item is 'Anonymous Hotline' with a mean of 2.96.

The mean scores of the 21 whistle blowing program items are then compared between the Internal Audit functions that are responsible for the program and those that are not responsible for the program. The result shows that the mean score for 20 items is higher when the Internal Audit function is responsible for the program. Only for 1 out of 21 item (no 8), the mean score is slightly higher for IA that are not responsible for the program.

Table 4.4e

Means Scores of the 21 Whistle Blowing Program Items From the Chief Audit Executive's (CAE) Perspectives

Rank	Items of Whistle Blowing Program	IA Responsible for the Program (n=36) Mean	IA Not Responsible for the Program (n=177) Mean
1	Internal audit is responsible for reviewing compliance with company policies and procedures.	4.0000	3.0000
2	Internal audit is responsible for reviewing compliance with the external rules and regulation.	4.0000	3.1073
3	The code of ethics is comprehensive and encourages reporting of wrongdoing	3.7500	2.9944
4	The code of ethics is adequately communicated and well distributed	3.2778	3.0000
5	All employees need to acknowledge and sign-off their compliance with the code of ethics regularly	3.9444	3.7232
6	The code of ethics awareness program is conducted regularly	4.0556	3.6836
7	The whistle blowing policy is comprehensive and encourages reporting of wrongdoing	3.8056	3.3164
8	Internal audit is responsible for verifying the compliance with the code of ethics.	3.3611	3.3842
9	Internal audit is responsible for the investigation of the whistle blowing complaints.	3.6389	2.8701
10	The communication channel is not complicated.	4.1667	3.0282
11	The communication channel is inexpensive.	4.2222	3.0284
12	The communication channel is easily accessible.	4.2500	3.0282
13	The communication channel is manned by an independent recipient.	3.3333	2.9944
14	The whistle blowing policy provides sufficient protection of the whistle blower	3.4167	2.9944
15	Internal audit is responsible for detecting the fraud indicator via the review of internal control.	4.1944	3.0056

Rank	Items of Whistle Blowing Program	IA Responsible for the Program (n=36) Mean	IA Not Responsible for the Program (n=177) Mean
16	The whistle blowing policy is adequately communicated and well distributed	3.2778	2.8475
17	The communication channel is staffed by qualified internal staff.	3.6389	3.1695
18	The communication channel is staffed by expert staff.	4.0000	3.0960
19	The whistle blowing policy awareness program is conducted regularly	4.3056	4.1412
20	The communication channel provides anonymous reporting of wrongdoing.	4.2500	4.0565
21	The communication channel recipient cannot easily trace the whistle blower identity or location.	3.9722	2.9605

The results from Table 4.4e indicates that items under internal audit's responsibility (items 1 and 2) (2 items), dominate the effectiveness of whistle blowing program from the perspectives of the Chief Audit Executives. This implies that all the respondents regard the 2 attributes of internal auditing responsibility to be of great importance to the whistle blowing program.

4.5 Correlation Analysis

Table 4.5 provides a summary of the results from correlation analysis. The computation of the Pearson correlation coefficients was performed to obtain an understanding of the relationship between all the variables in the study. The values of the correlation coefficients (r) given in Table 4.5 indicate the strength of the relationship between variables. As shown in Table 4.5, overall correlation values of the variables showed

correlations coefficients with values below 0.5. These generally indicate weak associations between variables.

With regards to whistle blowing program components and fraud occurrence relationship, the correlation is generally positive but weak. It gives indication that the whistle blowing program components are not the major or the only variables influencing fraud occurrence.

Table 4.5
Pearson Correlations of Study Variables

	Policy	Code	CCAnonymous	CCStaffing	IAResponsibility	Fraud
Policy	1					
Code	.435**	1				
CCAnonymous	.488**	.363**	1			
CCStaffing	.489**	.300**	.351**	1		
IAResponsibility	.204**	.321**	-.015	.077	1	
Fraud	.309**	.004	.207**	.172*	.029	1

Note: *p<.05; **p<.01

4.6 Re-statement of Hypotheses

In light of the results of the factor analysis, some amendments have to be made to the statement of hypotheses stated earlier. The hypotheses tested in this study are as follows:

- Relationships between whistle blowing program components and fraud occurrence:

  H1a: The more effective the whistle blowing policy support of the whistle blower, the lower the number of fraud occurrence.

  H1b: The more effective the code of ethics or conducts, the lower the number of fraud occurrence

H2a: The more effective the anonymous hotline, the lower the number of fraud occurrence

H2b: The more effective the hotline staffing, the lower the number of fraud occurrence.

H3: The higher the internal audit responsibility, the lower the number of fraud occurrence.

- Relationships between whistle blowing complaints practice and fraud occurrence:

H4a: Whistle blowing complaints practice mediate the relationship between the policy of whistle blowing and fraud occurrence that is the greater the extent of policy of whistle blowing, the greater will be the whistle blowing complaints practice be, leading to lower number of fraud occurrence.

H4b: Whistle blowing complaints practice mediate the relationship between the anonymous hotline and fraud occurrence that is the greater the extent of the anonymous hotline, the greater will be the whistle blowing complaints practice be, leading to lower number of fraud occurrence.

H4c: Whistle blowing complaints practice mediate the relationship between the internal audit responsibility and fraud occurrence that is the greater the extent of internal audit responsibility, the greater will be the whistle blowing complaints practice be, leading to lower number of fraud occurrence.

H4d: Whistle blowing complaints practice mediate the relationship between the hotline staffing and fraud occurrence that is the greater the extent of the hotline staffing, the greater will be the whistle blowing complaints practice be, leading to lower number of fraud occurrence.

4.7 Hypotheses Testing

In order to address the other research objectives on the relationship between whistle blowing program components and fraud occurrence as well as the influence of complaints practice on fraud occurrence, regression analyses were conducted. However, before conducting the analysis, the data were first examined to detect whether there is any serious violations from the basic assumptions underlying the regression analysis, namely linearity, normality and homoscedasticity (Hair et al., 1998).

The first assumption, linearity is assessed through an analysis of partial regression plots. The plots in Appendix E show the relationship between a single independent variable to the dependent variable. A visual examination of the plots indicated that there was no obvious U-shaped or other curvilinear relationship, thus, meeting the assumption of linearity for each independent variable.

The next assumption deals with homoscedasticity. As suggested by Hair et al. (1998), to show the existence of homoscedasticity, diagnosis is made by plotting the residuals (studentized) against the predicted dependent values and comparing them to the null plot.

The scatter plots in Appendix F show no discernible patterns, thus, indicating homoscedasticity in the multivariate (the set of independent variables) case.

The final assumption that is normality, is examined by normal probability-plot (P-P) of the residuals. From the normal p-p plot in Appendix G, the values fall along the diagonal with no substantial or systematic departures, indicating that the residuals are about normally distributed.

Overall, inspection on data revealed that there was no serious violation of the basic assumptions. Therefore, the use of regression for subsequent analysis is appropriate. The interpretation of the regression analysis is based on the standardised coefficient beta (ß) and adjusted R^2 which provides evidence whether to support or not to support the hypotheses stated earlier in the chapter.

4.7.1 Regression Analysis on the Relationships Between Whistle Blowing Program Components and Fraud Occurrence

The following presents the results of the statistical tests of the hypotheses to address the research objectives.

Table 4.7a

Regression Coefficient and Test for Multicollinearity Coefficients[a]

R^2: 0.126 Adjusted R^2: 0.105 F: 5.990	Std. Coeff. Beta	T	Sig.	Collinearity Statistics Tol.	VIF
(Constant)	-1.466	-0.717	0.474		
Whistle Blowing Policy	**1.686**	3.733	**0.000***	0.587	1.703
Anonymous Hotline	0.446	1.427	0.155	0.696	1.438
Code of Ethics	**-0.895**	-2.480	**0.014***	0.706	1.416
Internal Audit's Responsibility	0.110	0.352	0.725	0.857	1.167
Hotline Staffing	0.286	0.441	0.660	0.738	1.355

a. Dependent variable: Fraud

* at 0.05 significant level

4.7.1.1 Hypothesis 1

H1a: The more effective the whistle blowing policy support of the whistle blower, the lower the number of fraud occurrence.

Table 4.7a shows that the model is significant (F = 5.990) (Sig. F = 0.000). The model explained 10.5 % of the variation in fraud occurrence (Adjusted $R^{2:}$ 0.105). Whistle blowing policy has significant influence on the fraud occurrence (Beta = 1.686, p = 0.05) (sig. F = 0.000). However, since the evidence shows that whistle blowing policy positively influences the fraud losses, Hypothesis 1a is rejected.

H1b: The more effective the code of ethics or conducts, the lower the number of fraud occurrence

Table 4.7a suggests that the model is significant (F = 5.990) (Sig. F = 0.000). The model explained 10.5% of the variation in fraud occurrence. Code of ethics does have

significant influence on fraud occurrence. (Beta = -0.895, p = 0.05)(sig. F = 0.014). The evidence shows that code of ethics negatively influences the fraud occurrence. Therefore, Hypothesis 1b is accepted.

4.7.1.2 Hypothesis 2

H2a: The more effective the anonymous hotline, the lower the number of fraud occurrence

Table 4.7a suggests that the model is significant (F = 5.990) (Sig. F = 0.000). The model explained 10.5% of the variation in fraud occurrence. However, anonymous hotline does not has significant influence on the fraud losses (Beta = 0.446, p > 0.05) (sig. F = 0.155). Therefore, Hypothesis 2a is rejected.

H2b: The more effective the hotline staffing, the lower the number of fraud occurrence.

Table 4.7a suggests that the model is significant (F = 5.990) (Sig. F = 0.000). The model explained 10.5% of the variation in fraud occurrence. However, hotline staffing does not has significant influence on the fraud losses (Beta = 0.286, p > 0.05)(sig. F = 0.660). Therefore Hypothesis 2b is rejected.

4.7.1.3 Hypothesis 3

H3: The higher the internal audit responsibility, the lower the number of fraud occurrence.

Table 4.7a suggests that the model is significant (F = 5.990) (Sig. F = 0.000). The model explained 10.5% of the variation in fraud occurrence. However, internal audit responsibility does not have significant influence on fraud occurrence. (Beta = 0.110, p > 0.05)(sig. F = 0.725). Therefore, Hypothesis 3 is rejected.

4.7.1.4 Multicollinearity Analysis

For the regression of independent variables on fraud occurrence, the tolerance values, the variance inflation factor (VIF) and the condition index for all the independent variables are examined to detect multicollinearity. The VIF should be close to 1.00 to indicate little or no multicollinearity (Hartline et al., 1998). Hair et al. (1998) suggest a cutoff value of 10.00 as an acceptable VIF. From the tolerance and VIF values shown in the Table 4.7a, the tolerance value is more than 0.1 and VIF value is less than 10. This shows that the variables are free from multicollinearity problem.

4.7.2 Regression Analysis on the Relationships Between Whistle Blowing Complaints Practice and Fraud Occurrence

4.7.2.1 Hypothesis 4

H4a: Whistle blowing complaints practice mediate the relationship between the policy of whistle blowing and fraud occurrence that is the greater the extent of policy of whistle blowing, the greater will be the whistle blowing complaints practice be, leading to lower number of fraud occurrence.

H4b: Whistle blowing complaints practice mediate the relationship between the anonymous hotline and fraud occurrence that is the greater the extent of the anonymous hotline, the greater will be the whistle blowing complaints practice be, leading to lower number of fraud occurrence.

H4c: Whistle blowing complaints practice mediate the relationship between the internal audit responsibility and fraud occurrence that is the greater the extent of internal audit responsibility, the greater will be the whistle blowing complaints practice be, leading to lower number of fraud occurrence.

H4d: Whistle blowing complaints practice mediate the relationship between the hotline staffing and fraud occurrence that is the greater the extent of the hotline staffing, the greater will be the whistle blowing complaints practice be, leading to lower number of fraud occurrence.

Table 4.7b:

Regression Coefficient and Test for Multicollinearity Coefficients[a]

R^2 0.443 Adjusted R^2 0.429 F: 32.886	Std. Coeff. Beta	T	Sig.	Collinearity Statistics Tol.	VIF
(Constant)		-9.286	.000		
Whistle Blowing Policy	.268	3.963	.000	.587	1.703
Anonymous Hotline	-.151	-2.448	.015	.706	1.416
Code of Ethics	.299	4.806	.000	.696	1.438
Internal Audit's Responsibility	.321	5.310	.000	.738	1.355
Hotline Staffing	.127	2.272	.024	.857	1.167

b. Dependent variable: Whistle Blowing Complaints Practice
* at 0.05 significant level

Table 4.7b above shows the summary of the multiple regression analysis regarding whistle blowing program components on whistle blowing complaints practice. From the table, the model is significant (F = 32.886)(Sig. F = 0.000, p = 0.05). Based on the adjusted R^2 value, the model explained 42.9% of the variation in whistle blowing complaints practice. All the whistle blowing program components have significant influence on complaints practice (p = 0.05)(sig. F = 0.000). All program components have positive coefficient (Beta) except for the hotline staffing. Therefore, the evidence shows that all whistle blowing program components except hotline staffing positively influences the complaints practice.

Table 4.7c:

Regression Coefficient and Test for Multicollinearity Coefficients[a]

R^2: 0.140 **Adjusted R^2:** 0.136 **F:** 34.289	**Std. Coeff.** **Beta**	**T**	**Sig.**	**Collinearity Statistics** **Tol.**	**VIF**
(Constant)		14.062	.000		
Whistle Blowing Complaints Practice	0.577	5.856	.000	1.000	1.000

Dependent variable: Fraud

* at 0.05 significant level

Table 4.7c above shows the summary of the multiple regression analysis regarding whistle blowing complaints practice on fraud occurrence. From the table, the model is significant (F = 34.389)(Sig. F = 0.000, p = 0.05). The model explained 13.6 % of the variation in fraud occurrence. Whistle blowing complaints practice has significant influence on fraud occurrence (Beta = 0.577, p = 0.05)(sig. F = 0.000). However, the evidence shows that whistle blowing complaints practice positively influences the fraud occurrence. Therefore all the hypotheses i.e. Hypotheses 4a to 4d are rejected.

4.7.1.2 Multicollinearity Analysis

For the regression of whistle blowing program on complaints practice, the tolerance values, the variance inflation factor (VIF) and the condition index for are examined to detect multicollinearity. The VIF should be close to 1.00 to indicate little or no multicollinearity (Hartline et al., 1998). Hair et al. (1998) suggest a cutoff value of 10.00 as an acceptable VIF. Table 4.7b shows that the tolerance value is more than 0.1 and VIF value is less than 10. This shows that the variables are free from multicollinearity problem.

For the regression of complaints practice on fraud occurrence, the tolerance values, the variance inflation factor (VIF) and the condition index for are examined to detect multicollinearity. The VIF should be close to 1.00 to indicate little or no multicollinearity (Hartline et al., 1998). Hair et al. (1998) suggest a cutoff value of 10.00 as an acceptable VIF. Table 4.7c shows that the tolerance value is more than 0.1 and VIF value is less than 10. This shows that the variables are free from multicollinearity problem.

4.8 Chapter Summary

This chapter focuses on the analyses of the hypotheses. Several methods of analyses were used to test these alternative hypotheses. The analysis used to test the hypotheses includes descriptive analysis and statistical analysis.

The hypotheses sought to test for a significance difference of five variables of whistle blowing program components. The fraud occurrence is measured only with regard to financial losses.

The descriptive statistics (mean) shows that the respondents rank the internal audit responsibility as the most strong or effective part of the whistle blowing program.

This study has discussed the several findings with respect to the whistle blowing program components that have an impact on the fraud occurrences i.e. the financial losses suffered by Malaysian Public Listed Companies.

Five whistle blowing program components that is Hotline Staffing, Internal Audit's Responsibility, Anonymous Hotline, Code of Ethics and Whistle Blowing Policy are treated as independent variables, while the fraud occurrence is treated as the dependent variable. The whistle blowing complaints practices that comprise of internal and external whistle blowing on the other hand are treated as moderating variables.

Analysis pertaining to reasons whether the whistle blowing program components have an effect on the fraud losses was conducted. The whistle blowing program components were analysed according to the five factors, which were found to have a significant influence on the fraud losses. The results shows that only two out five factors are statistically significant i.e. whistle blowing policy and code of ethics. The analysis shows that whistle blowing policy positively influenced the fraud occurrence. On the other hand, code of ethics negatively influenced the fraud occurrence.

The influence of whistle blowing complaints practice on the fraud occurrence, that is, financial losses was further analysed. The analysis shows whistle blowing complaints practice do statistically influenced the fraud occurrence. However, since the results show that whistle blowing complaints practice positively influenced the fraud occurrence, there is no mediating effect.

Overall, there is only one acceptable hypothesis result i.e. the effective the code of ethics or conducts, the lower the number of fraud occurrence.

CHAPTER 5

DISCUSSION AND CONCLUSION

5.0 Introduction

This chapter provides a recapitulation of the major findings and outlines the implications of the study. Limitations of the study and suggestions for future research are also deliberated.

5.1 Recapitulation of Major Findings

The major significant findings from the four broad hypotheses tested are presented in Exhibit 5.1:

Exhibit 5.1:
Summary of Major Findings

The summary of major findings introduces four hypotheses postulated in this study.

Hypothesis 1:

Whistle blowing policy positively influences the fraud occurrence and code of ethics negatively influences fraud occurrence.

Hypothesis 2:

Anonymous hotline and hotline staffing does not have significant influence on fraud occurrence.

Hypothesis 3:

Internal audit responsibility does not have significant influence on fraud occurrence.

Hypothesis 4:

Code of ethics negatively influences the fraud occurrence while whistle blowing policy positively influence the fraud occurrence. Whistle blowing complaints practice positively influences the fraud occurrence.

5.2 Discussion

Section 5.2 above provides a summary of significant results of the study. The hypotheses investigated in this study found some evidence with respect to the purpose of this study and confirmed the results of some previous studies.

The purpose of this study was to examine the extent of the whistle blowing receipts by the internal audit department, the effect of the whistle blowing program components have on the fraud occurrence and the influence of these components on the whistle blowing practices. The data analysed were gathered through the Questionnaire on Receipt of Whistle Blowing by Internal Auditors sent to all Chief Audit Executives of the Malaysian Public Listed Companies.

Having obtained the whistle blowing program components and the whistle blowing complaints practice items, a survey was undertaken to determine the influence of the whistle blowing program components on the whistle blowing complaints practice as well as on the fraud occurrence.

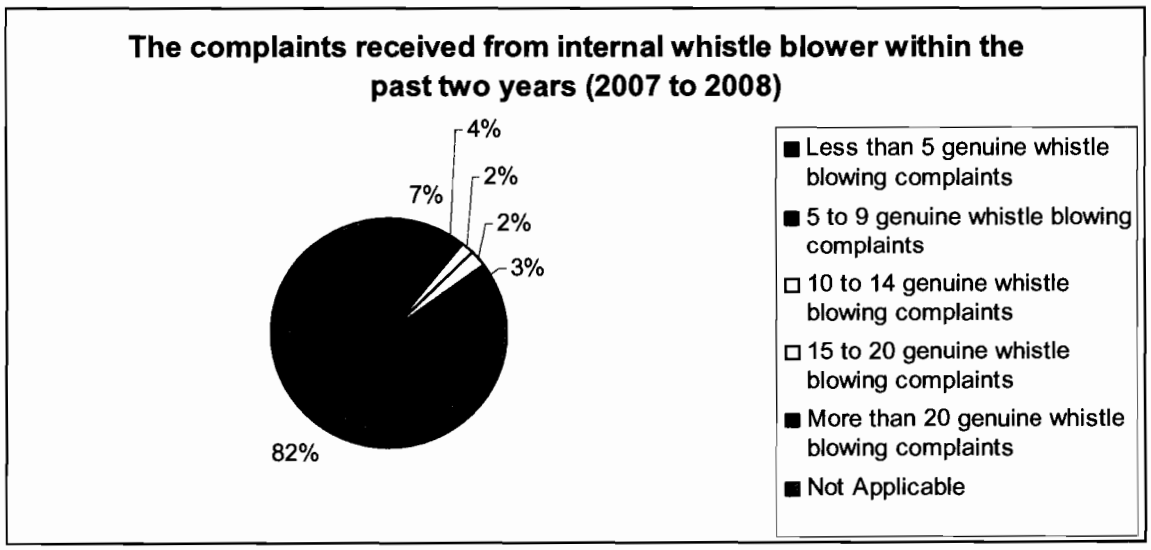
The following sections deliberate the results presented in Chapter 4 in line with the theoretical perspectives and empirical works presented in Chapter 2.

5.2.1 The Extent of Whistle Blowing Receipt

One of the major findings in this research is the extent of whistle blowing receipt by internal auditors in Malaysian Public Listed Companies. The result shows that majority that is 82 percent (174 out of 213) of the internal audit functions surveyed are not responsible for receiving the whistle blowing complaints from internal whistle blower and 86 percent (184 out of 213) are not responsible for receiving the whistle blowing complaints from the external whistle blower.

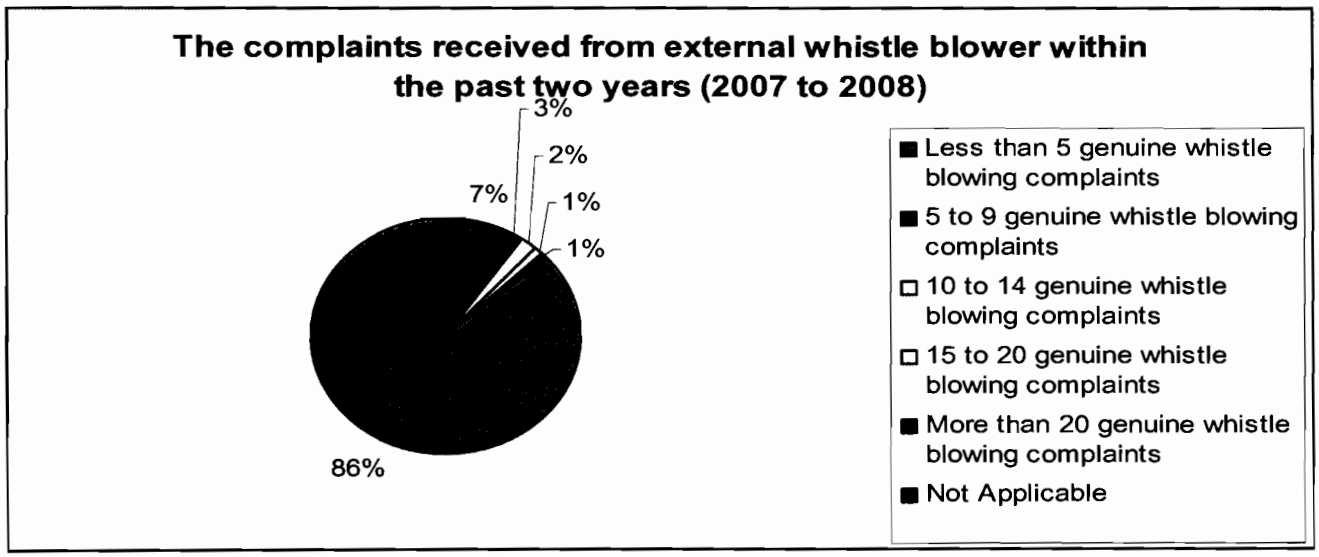
For the internal audit functions that are responsible for receiving internal complaints (Figure 5.1), 7 percent (15) received less than 5 genuine complaints, 4 percent (8) received between 5 to 9 genuine complaints, 2 percent (4) received between 10 to 14 genuine complaints, 2 percent (5) received between 15 to 19 genuine complaints and 3 percent (7) received more than 20 genuine complaints.

***Figure 5.1*: Internal Whistle Blowing Receipts**



For the internal audit functions that are responsible for receiving external complaints (Figure 5.2), 7 percent (15) received less than 5 genuine complaints, 3 percent (6) received between 5 to 9 genuine complaints, 2 percent (4) received between 10 to 14 genuine complaints, 1 percent (2) received between 15 to 19 genuine complaints and 1 percent (2) received more than 20 genuine complaints.

***Figure 5.2*: External Whistle Blowing Receipts**



One of the possible reasons for the lack of whistle blowing program implementation in Malaysian companies is due to absence of legislation in Malaysia that forces the establishment of whistle blowing program. Whistle blowing provisions in Malaysia are included under the Capital Market and Services Act 2007 (CMSA) and the Securities Industry Act (1983) which provides the employees, independent auditors and key officers' protection when they whistle blow but does not compel a whistle blowing program. In the United States, Sarbanes-Oxley Act (2002) requires audit committees to

take a role in whistle blowing and reducing corporate fraud. Section 301 of the Act compels audit committees to develop reporting mechanisms for the recording, tracking, and acting on information provided by employees anonymously and confidentially. By mandating policies and protection for reporting wrongdoing, the Act goes beyond merely encouraging companies to be more responsive to employee whistleblowers.

In this study, the results also shows that the overall trend of whistle blowing complaint in Malaysian public listed companies surveyed, is neither increasing nor decreasing (Figure 5.3. and 5.4).

***Figure 5.3*: Internal Whistle Blowing Trend**

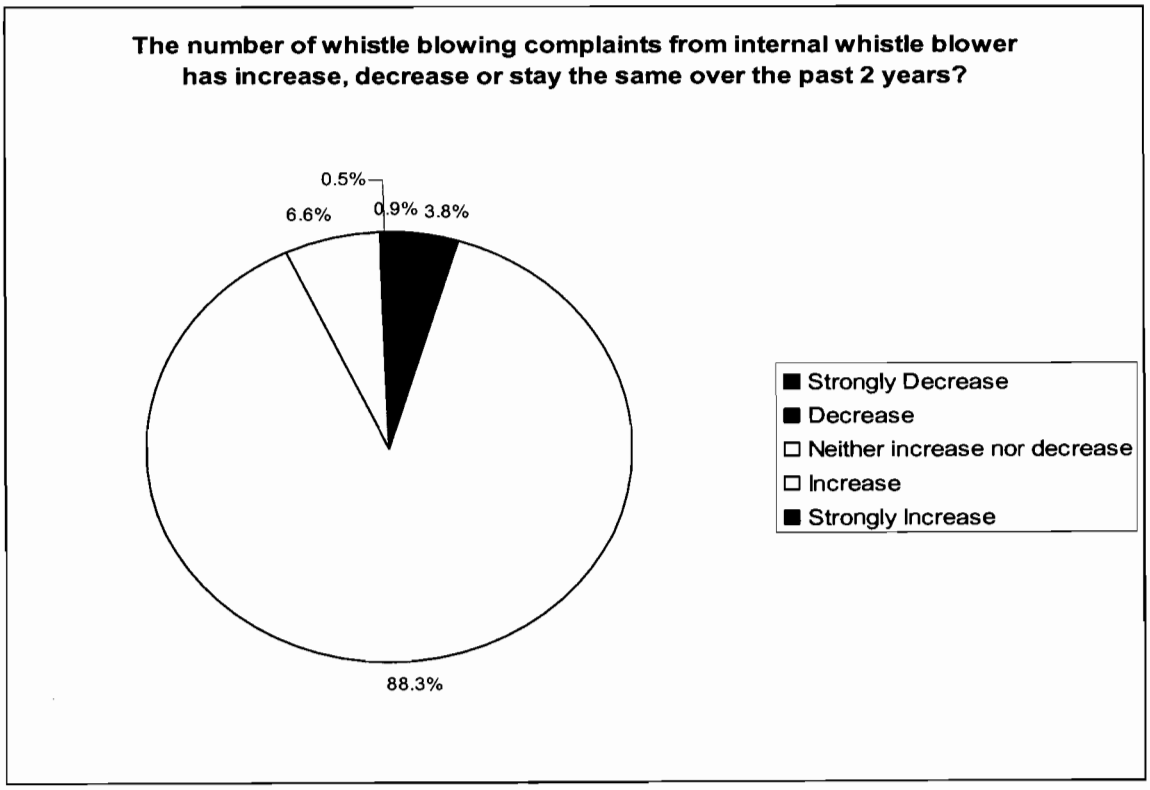
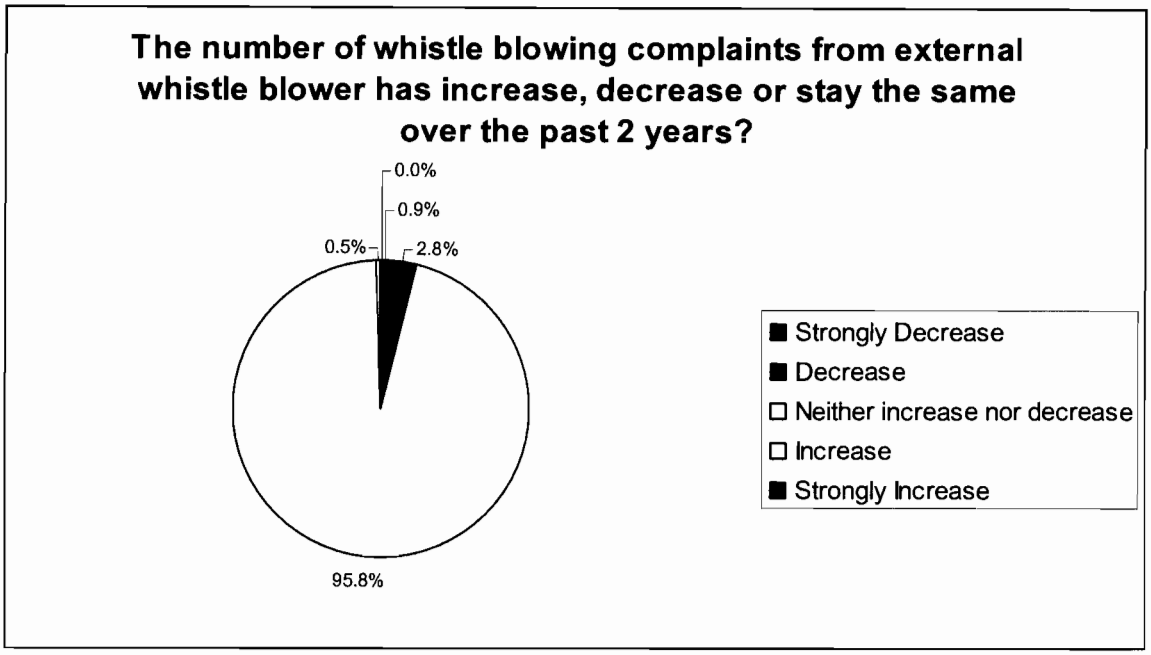


Figure 5.4: **External Whistle Blowing Trend**



The reason for the static trend of whistle blowing complaint is due to the corporate culture. There is cultural difference between the corporate cultures in the west and corporate cultures in Asia with regard to whistle blowing practice, which is not part of this study. In the west, research on whistle blowing shows that the whistle blower can be regarded as a model employee (Vinten, 1992). However, the situation may not necessarily be the same in Asia as perceptions of justice, right versus wrong, morality, and loyalty may differ very much in different countries (Vogel, 1992) and cross-cultural research has found that country culture does have an impact on whistle blowing perception and intentions (Brody et al., 1999; Chiu, 2002). In a study by Patel, (2003), the results suggest that whistle blowing is likely to be more effective in Australian culture compared to Indian and Chinese cultures. Indeed, whistle blowing can be considered unacceptable and unethical behaviour by any Chinese model employee (Chiu, 2002).

According to Vinten, (1999), the Chinese virtue which urges social conformity and harmony, makes the whistle blowing practice socially undesirable. Hwang et al. (2008) found that fear of retaliation and fear of media coverage may discourage whistle blowing practice in a Chinese society.

5.2.2 Whistle Blowing Program Components

The whistle blowing program variables were derived from various literatures and the four whistle blowing program components are: whistle blowing policy, code of ethics or conduct, anonymous hotline and internal audit responsibility.

This study suggests that the whistle blowing program should be divided into five components instead of only four components. The functions suggested are whistle blowing policy, anonymous hotline, code of ethics, internal audit responsibility and hotline staffing. The new component included in this study is hotline staffing.

The inclusion of hotline staffing component is in fact in line with the AICPA recommendation to staff the hotline 24 hours a day, 7 days a week with trained interviewers (Slovin, 2006). Besides anonymous hotline, the hotline needs to be staffed with expert and qualified staff because the concerns need to be effectively captured for further investigation.

5.2.2.1 Whistle Blowing Policy

It is observed that 'Whistle Blowing Policy' is the third ranked item of whistle blowing program from the perspective of Chief Audit Executives. The respondents rank the whistle blowing policy as a moderately strong component (more than 3) of the whistle blowing program. This suggests that all the respondents regard the attributes of whistle blowing policy to be of fairly important to the whistle blowing program. Their perceptions are also in line with the Sarbanes-Oxley Act. Sarbanes-Oxley Act (2002) mandates policies and protects the whistle blowers from any retaliation when disclosing fraud or wrongdoing. In Malaysia, the whistle blowers that are the auditors and employees of a public-listed company are protected under the Securities Industry Act (1983). However, the act does not compel whistle blowing policies be implemented. So far only the Government-Linked Companies (GLC) had included whistle blowing policies an item for the GLC Transformation Initiatives to improve the transparency of the companies through revamped policies. Nevertheless, recently the Prime Minister Datuk Seri Najib Tun Razak has announced the formulation of the Whistle Blower Act when tabling the 2010 Budget in Parliament to encourage informers to expose corrupt practices and other misconduct.

5.2.2.2 Anonymous Hotline

Anonymous hotline is the least rated item (2.96) from the perspective of Chief Audit Executives. As such, the respondents rank the anonymous hotline as the weakest component of the whistle blowing program. This entails that all the respondents regard

the attributes of anonymous hotline to be of very little importance to the whistle blowing program.

The Sarbanes Oxley Act of 2002 requires that audit committees of publicly traded firms provide an anonymous whistle-blowing hotline for employees to report questionable accounting and auditing matters. In Malaysia, there is no such requirement to establish an anonymous hotline for whistle blowing reporting purposes.

5.2.2.3 Code of Ethics

The result shows that 'Code of Ethics' is the second ranked (3.57) item of whistle blowing program from the perspective of Chief Audit Executives. The respondents rank the code of ethics as a strong component of the whistle blowing program. This suggests that all the respondents regard the attributes of code of ethics to be of high importance to the whistle blowing program. Their perceptions are also in line with Murdock (2003) suggestion that internal audit liaise with management to ensure that the whistle blowing program is included in the code of ethics.

5.2.2.4 Internal Audit Responsibility

From the results, it is observed that, 'Internal Audit Responsibility' is a highly rated (4.13) item of whistle blowing program from the perspective of Chief Audit Executives. Therefore, the respondents rank the internal audit responsibility as the most strong or effective part of the whistle blowing program. This entails that all the respondents regard the attributes of internal auditing responsibility to be of great importance to the whistle

blowing program. Their perceptions are also in line with the Sarbanes-Oxley Act (2002) that requires audit committees to establish procedures for:

- the receipt, retention, and treatment of complaints received by the issuer regarding accounting, internal accounting controls, or auditing matters; and
- the confidential, anonymous submission by employees of the issuer of concerns regarding questionable accounting or auditing matters.

5.2.2.5 Hotline Staffing

In assessing the effectiveness of the hotline, an audit committee should review whether the hotline utilise trained interviewers to handle calls to the hotline rather than a voice mail system (AICPA, 2005). A well trained person can elicit information helpful for gauging the seriousness and truthfulness of the whistle blowing complaints.

However, from the results, it was noted that hotline staffing is the second least rated item from the perspective of Chief Audit Executives. As such, the respondents rank the hotline staffing as a weak (less than 3) component of the whistle blowing program. This entails that all the respondents regard the attributes of hotline staffing to be of little importance to the whistle blowing program. Furthermore, in Malaysia, there is no requirement for public listed companies to establish a hotline for whistle blowing complaint purposes.

5.2.3 The Effectiveness of Whistle Blowing Program

Near and Miceli (1995) defines the effectiveness of whistle blowing as "the extent to which the questionable or wrongful practice (or omission) is terminated at least partly

because of whistle blowing and within reasonable timeframe". In this study, the effectiveness of the whistle blowing program is measured via the effectiveness of the five program components that is whistle blowing policy, anonymous hotline, code of ethics, internal audit responsibility and hotline staffing in relation to the fraud occurrence.

5.2.3.1 The Effectiveness of Whistle Blowing Policy

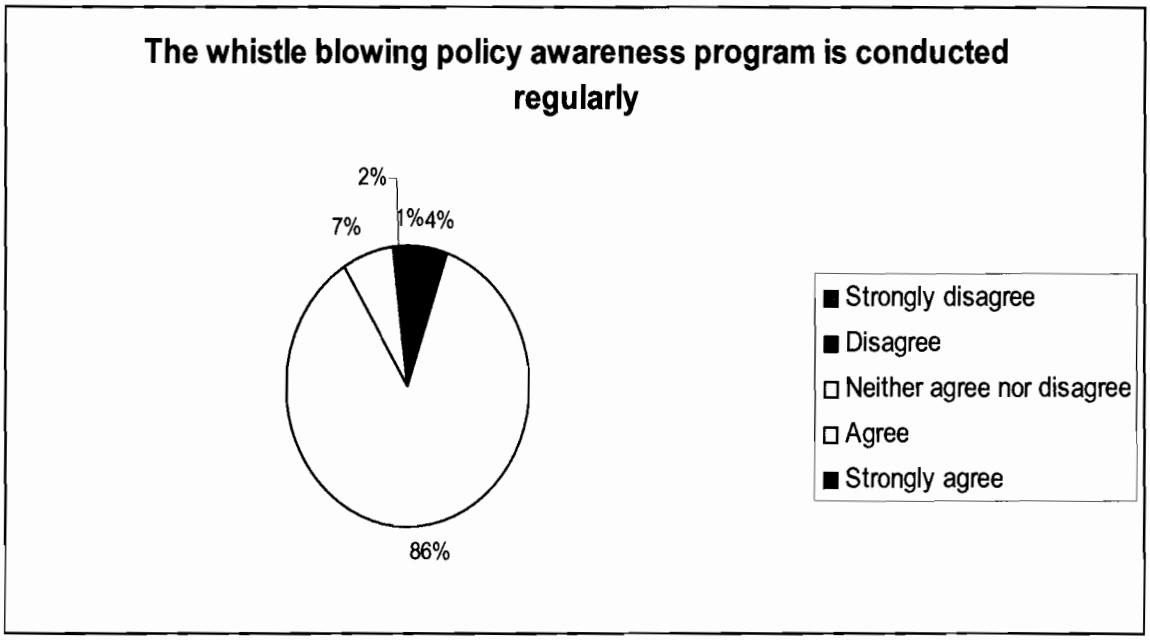
Whistle blowing policy is one of the techniques utilised by companies to reduce the direct and indirect costs associated with all forms of fraud. This study examines the influence of whistle blowing policy on the fraud occurrence. In this study, the effectiveness of the whistle blowing policy is the CAE perceived effectiveness of the policy in their organisation. The results shows that the CAE perceived effectiveness of the policy whistle blowing policy is positively related to the fraud occurrence that is the more effective the policy is perceived, the more fraud will occur.

This result confirmed the survey by PricewaterhouseCoopers (2003) which indicates that eight out of ten companies around the world declare they have a whistle blowing policy in place, however only half of them declare the policy is effective (Baker, 2008). However, this result differ from other researched literature that is Durant (2004), Eaton and Akers (2007) and Eaton and Weber (2008).

One of the possible reasons is lack of regular awareness program conducted after the initial policy communication. The results in Table 4.4c shows that this item rating is slightly above average that is the mean score of 3.04. In addition, majority of the

respondents that is 86 percent (183 out of 213) are undecided whether the whistle blowing awareness program is regularly conducted or not (Figure 5.5).

***Figure 5.5*: Whistle Blowing Policy Awareness**



5.2.3.2 The Effectiveness of Code of Ethics

An internal auditor should work with management to make sure the whistle blower program is included in writings in the code of ethics (Murdock, 2003). In this study, the effectiveness of the whistle blowing policy is the CAE perceived effectiveness of the code of ethics in their organisation. The results shows that the CAE perceived effectiveness of the code is negatively related to the fraud occurrence that is the more effective the code is perceived, lesser fraud will occur.

This result confirmed the Ernst and Young (EY) 10th Global Fraud survey conducted in 2007 and 2008. EY interviewed nearly 1,200 executives across the world (from 33 countries) about their experiences of bribery and corruption. Approximately 90 percent of the respondents declared that they have the code and four out of five of those that have the code believed it is useful in preventing and detecting fraud.

In additions, the 2008 Report to the Nation on Occupational Fraud and Abuse also shows that organisations with such code in place suffered lower fraud losses compared with the organisations where there was no such code (ACFE, 2008)

Code of ethics is effective when it is communicated and enforced consistently throughout the organisation (Rufus & Robert 2004). The result in Figure 4.1 shows that this item rating is approaching towards the effective side that is the mean score of 3.57. This indicates that majority of the respondents perceived that code of ethics is moderately effective in reducing fraud occurrence as it encourages reporting of wrongdoings and helps to resist unethical behaviour.

5.2.3.3 The Effectiveness of Anonymous Hotline

Confidential reporting mechanisms or whistle blowing hotlines are often proposed as one tool in the organisation's internal control arsenal for dealing with fraud. In this study, the effectiveness of the anonymous hotline is the CAE perceived effectiveness of the anonymous hotline in their organisation. The result shows that the CAE perceived

effectiveness of the anonymous hotline does not have any relationship with fraud occurrence.

This result confirmed the Ernst and Young (EY) 10th Global Fraud survey conducted in 2007 and 2008. On the question on successful measures to deter fraud, less than a third put a whistle blowing hotline as the most successful measures (Ernst & Young, 2008). Previous research indicates that the existence of a hotline is not always effective in even detecting fraud, much less preventing or correcting it (Curtis, 2006).

This result differs from other researched literatures that are Johnson and Wright (2004), Slovin (2006), ACFE (2004, 2008), Moberly (2006). This is possibly due to perception on the credibility of anonymous reporting by the whistle blowing complaints recipient. Sometimes anonymous reporting is open to abuse and complaints without concrete evidence and it might be just rumours and hearsays. Theoretical research indicates that anonymous hotline might be less effective at preventing and detecting fraud due to decreased perceptions of the credibility of whistle blowing allegations by those who are charged with evaluating such allegations (Near & Miceli 1995). Kaplan and Schultz (2006, 2007) suggest that the effectiveness of anonymous whistle blowing hotline could be compromised because those who are in charge for investigating such allegations might be less thorough compared to the non-anonymous reports.

5.2.3.4 The Effectiveness of Hotline Staffing

In order for whistle blowing mechanisms to achieve their objectives, observers of wrong-doing must be willing to make reports over the hotline, and those who receive the reports must respond appropriately. AICPA (2005) suggested to use dedicated and well-communicated feedback channels and to staff the hotline 24 hours a day, 7 days a week with trained interviewers (Slovin, 2006).

In this study, the effectiveness of the hotline staffing is the CAE perceived effectiveness of the hotline staffing in their organisation. The result shows that the CAE perceived effectiveness of the hotline staffing does not have any relationship with fraud occurrence.

This result differs from other researched literature that is Murdock (2008), ACFE (2008) and Bierstaker, Brody and Pacini, (2006). However, this result confirmed the Ernst and Young (EY) 10th Global Fraud survey conducted in 2007 and 2008 which states that less than a third put a whistle blowing hotline as the most successful measures to deter fraud (Ernst & Young, 2008).

One of the reasons for this is due to lack of expert and qualified staff to handle the complaints via the hotline as suggested by AICPA (2005). The results in Table 4.4c shows that this item rating is slightly above average that is the mean score of 3.07 and 3.05. In addition, the result indicates that majority that is more than 90 percents of the respondents are undecided whether the hotline is staffed with the qualified and expert staff.

5.2.3.5 The Effectiveness of Internal Audit Responsibility

Internal audit is the most common entity to follow up on anonymous reports of fraud. As suggested by Near and Miceli, (1995), a powerful recipient, who is accommodating the whistle blower, enhances the whistle blower's credibility, hence increasing the overall whistle blowing effectiveness.

In this study, the effectiveness of the internal audit responsibility is the CAE perceived effectiveness of the internal audit responsibility in their organisation. The result shows that the CAE perceived effectiveness of the internal audit responsibility does not have any relationship with fraud occurrence.

This result differed from the Ernst and Young (EY) 10th Global Fraud survey conducted in 2007 and 2008. EY interviewed nearly 1,200 executives across the world (from 33 countries) about their experiences of bribery and corruption. On the question on successful measures to deter fraud, 72 percent of the respondents indicated that internal audit was successful in detecting bribery and corrupt practices (Ernst & Young, 2008).

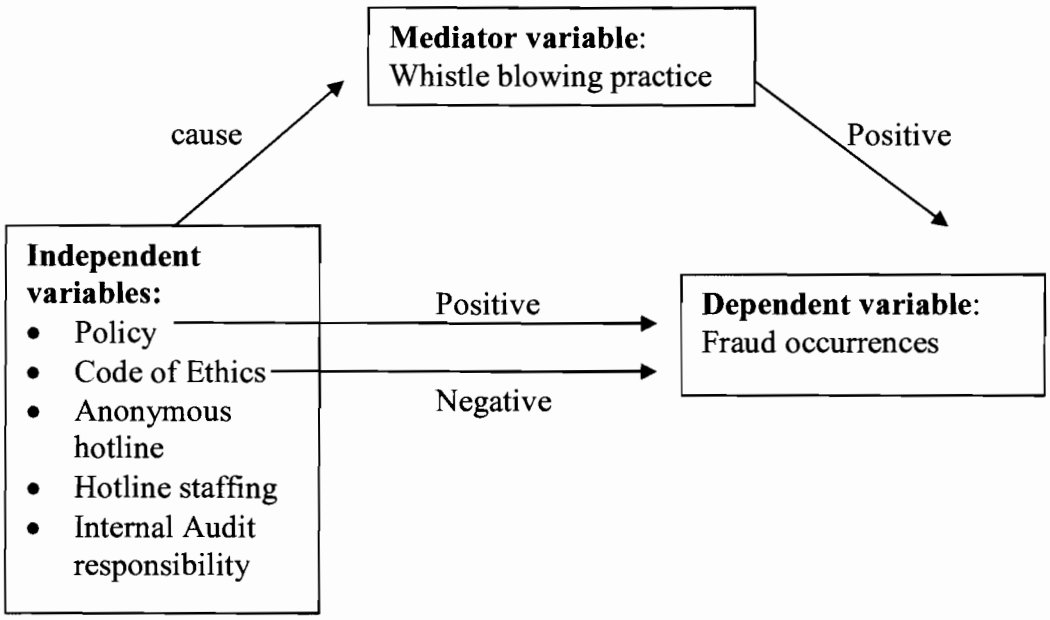
One of the possible reasons for the differences could be due to outsourcing of the internal audit functions to the accounting firms or external auditor. Organisations that outsourced their internal audit function are less likely to detect and self-report fraud than those that carry out their internal audit function themselves (Coram, Ferguson and Moroney, 2008).

5.2.3.6 Mediating Effects

In this study, it was hypothesised that whistle blowing complaints practice mediates the relationship between the five whistle blowing program components and fraud occurrence, that is the greater the extent of the whistle blowing programs, the higher the complaints practice be, leading to lower fraud occurrence.

The results show that two out of five whistle blowing program components is significantly associated with fraud occurrence, that are whistle blowing policy and code of ethics. The code of ethics is negatively associated with the fraud occurrence while whistle blowing policy is positively associated with the fraud occurrence. Therefore, the whistle blowing complaints practice can only mediate the impact of these two identified variables. However, the result also shows that the greater the complaints, the higher the fraud occurrence. Therefore, the study did not consider the mediating effect since the complaints practice does not reduce the fraud occurrence as suggested by the hypotheses.

***Figure 5.6*: Mediating Effect**



This study failed to capture the mediating effects of whistle blowing complaints practice on the fraud occurrence. This is due to the percentage of companies that have implemented whistle blowing program is relatively low that is less than 20 percent (38 out of 213) of the surveyed companies and there might be other functions or variables that might affect the relationship between the whistle blowing program and the fraud occurrence for example specific country legislation to promote organisational culture on whistle blowing. In Malaysian public listed companies, there is no legislation that compels whistle blowing policies, anonymous hotline and internal audit to be responsible for the whistle blowing program. The current legislation that is Securities Industry Act (1983) protects the whistle blowers from negative consequences but does not makes whistle blowing program implementation compulsory.

5.3 Implications of the Study

The logical question at this juncture is: What do the results of this study imply? In other words, how does the research contribute to theory building and provide guidance to the internal auditors? These questions are addressed in the following sections.

5.3.1 Theoretical Implications

The first theoretical implication is that this study has contributed to the agency theory and internal audit paradigm. This study supported how the agency theory provides more meaningful research in the internal audit discipline. This is based on the premise that internal audit is a feedback mechanism with the result that the principals have the ability to remedy any weaknesses before they have a significant effect on the overall internal control system and the financial condition of the organisation. This study explains the existence of agency theory postulated and its influence on the extent of whistle blowing receipt by internal auditors in Malaysian public listed companies and its effectiveness as an agent to the principal (top management, board members or audit committee) in combating fraud.

The second theoretical implication is that this study has contributed to the Theory of Reasoned Action (TRA) in terms of the whistle blowing behavior that is whether the complaints are reported to the internal audit function. This explain the whistle blowers attitude that is their trust on whether the internal audit function can protect them from the negative cost of their whistle blowing action.

5.3.2 Practical Implications

An important finding of this research pertains to the extent of whistle blowing receipt by internal auditors in Malaysian public listed companies. The first practical implications refer to changing of whistle blowing program components from four to five. The results show that the five components of the whistle blowing program are as per AICPA (2005) and Murdock (2003) recommendations; and SOX (2002) requirements.

- AICPA (2005) requires the use dedicated and well-communicated feedback channels and to staff the hotline 24 hours a day, 7 days a week with trained interviewers.
- Murdock (2003) suggested that the whistle blower program is included in the code of ethics.
- SOX (2002) requires audit committees to take a role in whistle blowing and reducing corporate fraud, to develop reporting mechanisms for the recording, tracking, and acting on information provided by employees anonymously and confidentially, mandating policies and protection for reporting wrongdoing.

The Prime Minister recently announced the formulation of the Whistle Blower Act during the 2010 Budget tabling. Therefore, it is recommended that the act enforce a minimum guideline on whistle blowing program to be adopted by the public listed companies. Without such guidelines, it may be difficult to promote the corporate culture of whistle blowing in Malaysia.

Besides the regulatory body, standard setter such as the Institute of Internal Auditors (IIA) has the important role play in guiding the internal audit function on whistle blowing program based on this study.

The rationale behind the extent of the whistle blowing program is that it provides opportunity for the Chief Audit Executives or internal auditors to get the Audit Committee's undivided attention to the whistle blowing complaints on the fraud occurrence. Establishing whistle blowing program give Chief Audit Executives an avenue for reporting the genuine whistle blowing complaint practices to the Audit Committee. The receipts of complaints, audit investigations and recommendations to improve the internal controls that are prone to fraud are symbols of their contribution, which result in improvements to the organisation as a whole.

Internal auditors can play an integral role in the development of whistle blowing programs by working with management to create a system that protects the anonymity of the employees who use it and gives them maximum access to the tools that will help them report their concerns (Murdock, 2003).

Chief Audit Executives believe that their responsibility is important in the whistle blowing program activities. The effectiveness of the whistle blowing program will also statistically influence the fraud occurrence. Internal auditing department also should be seen to conduct the program effectively and to have trained staff to handle the hotline. This study also shows that lack of regular training and awareness on the program will

have an impact on the complaints practice, fraud occurrence and to the organisation as a whole.

Audit committees should play their role in making sure the whistle blowing program components such as whistle blowing policies, code of ethics, anonymous hotline, hotline staffing is effective and vigorous. This is because these components could lead to lower fraud occurrence instead of higher fraud occurrence.

If this research has produced valuable ideas and results, then efforts should be made to continue this process and ensure that its results in the near and long-term future benefit the profession.

5.4 Limitations of the Study

This study provides empirical evidence that the whistle blowing program of the public listed companies in Malaysia does not statistically influence whistle blowing receipt by internal auditors and the fraud occurrence. This may be due to the absence of specific legislation, guidelines and auditing standards on whistle blowing enforced by the regulatory body and standard setters.

This study, however, has its limitations. Of 213 public listed companies included in this study, it is only representative of 22 percent of public listed companies for the year 2009. Consequently, the results could not be generalised to the population of internal auditors

as a whole. Furthermore, the extent of the whistle blowing program is only limited to the Murdock (2003), AICPA (2005) and Sarbanes-Oxley Act (2002).

Internal auditors normally work in a team during its normal operations. However, this study is limited since only Chief Audit Executives were examined and did not consider the dynamics of group interaction. Nevertheless, the study of Chief Audit Executives is the logical first step since they represent the internal audit department.

This study assumed that the internal auditors are of the same quality across firms for each designation. However, this may not be a valid assumption since years of experience of the internal auditors are not included in the study.

Financial loss due to fraudulent activity is the only measurement for the fraud occurrence in this study. Other measurements for the performance of the fraud occurrence can be addressed in a future research, such as the fraud trend, loss of reputation, financial distress, loss of capital for investors, and a drop in value in the stock market etc.

5.5 Suggestions for Future Research

Most of the suggestions for future research are born from the limitations just discussed. The others, however, are suggested by the findings of the study. This research study was an initial attempt to explore the extent of the whistle blowing receipt by the internal audit

department. Since these results are available, extensions of this line of research are suggested.

Future research should be conducted by looking at other factors of the whistle blowing program component for example whistle blower rewards. In addition, research can also be conducted from the perspective of the Malaysian internal auditors as the whistle blower. More research should be performed to consider the future of the internal audit profession and the impact of internal auditing on the fraud occurrence, which can be measured by reduction in losses, higher turnover and profits.

Future research should also consider the organisational or corporate culture of the Malaysian Public listed companies as this may have an impact on the whistle blowing complaints practice. Research can also be conducted from the perspective of the Malaysian whistle blower to determine their attitude and perceptions toward whistle blowing complaints practice.

This study could be replicated using external auditors as the recipient of whistle blowing complaints or even as the whistle blower themselves. It would be enlightening to learn whether the external and internal auditors encounter or engage in similar perceptions on the whistle blowing program and complaint practices.

5.6 Concluding Remarks

Based on the findings derived from this research endeavour, the following can be concluded:

1. The whistle blowing program components should be redefined into five factors that is whistle blowing policy, anonymous hotline, code of ethics, internal audit responsibility and hotline staffing. The CAE regards internal auditing responsibility to be of great importance to the whistle blowing program.

2. The extent of the whistle blowing receipts by Malaysian internal auditors differs from other researched literature in the United States. Majority of the internal audit functions surveyed are not responsible for receiving the whistle blowing complaints. For the internal audit functions that are responsible for receiving the complaints, the percentages of complaints received are relatively low. This is possibly due to the differences between the Western and Asian corporate culture on reporting wrongdoings. Another possible reason is the absence of legislation in Malaysia that forces the establishment of whistle blowing program.

3. This study shows that only two out of five whistle blowing program components does statistically influence the fraud occurrence that is whistle blowing policy and code of ethics or conduct. The CAE perception about the effectiveness of whistle blowing policy in their organisation is positively related to fraud occurrence while CAE perception about the effectiveness of code of ethics is negatively related to

fraud occurrence. This could be due to small number of companies implementing whistle blowing program and even when there is such program; it is not vigorous and actively promoted.

4. The results shows that CAE perception about the effectiveness of whistle blowing policy in their organisation is positively related to the fraud occurrence, that is the more the policy is perceived as effective, the more fraud incidents will occur. This result differ from other researched literature but confirmed the survey by PwC (2003) which indicates that eight out of ten companies around the world state they have a whistle blowing policy in place, however only half of them state the policy is effective (Baker 2008).

5. The result also shows CAE perception about code of ethics is negatively related to fraud occurrence, more the code is perceived as effective, lesser fraud incidents will occur. This result differ from other researched literature but confirmed the Ernst and Young (EY) 10th Global Fraud survey (2008) that approximately 90 percent of the respondents stated that they have the code and four out of five of those that have the code think it is useful in preventing and detecting fraud.

6. In terms of communication channel, the result shows that CAE perception about the effectiveness of anonymous hotline and hotline staffing does not have any relationship with the fraud occurrence. This result differ from other researched literature but confirmed the Ernst and Young (EY) 10th Global Fraud survey

(2008) that less than a third of the respondents put a whistle blowing hotline as the most successful measures in preventing and detecting fraud.

7. Although the CAE surveyed perceived internal audit responsibility as an important component of the whistle blowing program, the result shows that it the perceived effectiveness of internal audit responsibility does not have any relationship with the fraud occurrence. This result differed from other researched literature and Ernst and Young (EY) 10th Global Fraud survey (2008) findings that internal audit is one of the successful measure in detecting fraud. The difference is possibly due to outsourcing of the internal audit functions. Accounting firms or external auditor may be less likely to detect fraud since they are not working full-time at the companies.

8. It can be seen from the study that whistle blowing complaints practice has positive relationship with fraud occurrence, that is the higher the number of complaints received, the higher the number of fraud occurrence. Therefore, this study failed to capture the mediating effects of whistle blowing complaints practice on the fraud occurrence. This could be due to small number of companies implementing whistle blowing program, low percentage of whistle blowing complaints receipt. In addition, there might be other variables that affect the relationship between the whistle blowing program and the fraud occurrence, example country legislation and corporate culture on whistle blowing.

5.7 Chapter Summary

While the results in this study are by no means conclusive, it is felt that this study has contributed to the research done in the extent of the whistle blowing receipt by internal auditors. This study has also provided some evidence on the extent of the whistle blowing program and the relationship with the complaints practice and the fraud occurrence. However, further research is needed to evaluate the other variables that have impact on the effectiveness of the whistle blowing program and the fraud occurrence.

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APPENDIX A:

QUESTIONNAIRE TO CHIEF AUDIT EXECUTIVES

QUESTIONNAIRE ON:
WHISTLE BLOWING TO INTERNAL AUDITOR IN MALAYSIAN LISTED COMPANIES

Date: 6 July 2009

CHIEF AUDIT EXECUTIVE
INTERNAL AUDIT DEPARTMENT/DIVISION

Dear Sir/Madam

I am conducting a study on the above topic. This study is undertaken to fulfill the partial requirement of the academic program leading to a Doctor in Business Administration (DBA) at the Universiti Utara Malaysia (UUM). By taking fifteen minutes of your valuable time, you are providing information that is pertinent to this study.

The chief audit executives from public listed companies in Malaysia have been asked to complete this survey. I will be most appreciative if you could complete and return the enclosed survey in the pre-addressed, stamped envelope by **31 July 2009**.

Strict confidentiality is assured. The identity related to the code reflected on the instrument is known only to the researcher and will not be communicated in any form anytime.

Thank you very much for your time and cooperation. I greatly appreciate your contributions. If you have any questions, please contact me at 012-3164466.

Yours sincerely,

.....
(Badrul Hisham Mohd Yusoff)

DEMOGRAPHIC PROFILE
(CHIEF AUDIT EXECUTIVE)

SECTION A

Please tick (/) the appropriate choice.

1. Your qualification (excluding professional qualification which are covered in question 2 and question 4). Please tick all qualifications that you have :

	Certificate
	Diploma
	First degree
	Post graduate
	Other

If other, please specify:_____

2. Do you have a professional accounting and/or auditing qualification

	Yes
	No

If "yes", please proceed to the next question. If "no", please proceed to question 4.

3. Accounting and/or auditing professional (have completed and passed)

	MACPA (Malaysian Association of Certified Public Accountants)
	CACA (Chartered Association of Certified Accountants)
	CIMA (Chartered Institute of Management Accountants)
	CIA (Certified Internal Auditors)
	Other

If other, please specify:_____

4. Type of business of the company under Bursa Malaysia listing

	Trading
	Industrial products
	Consumer products
	Properties
	Finance
	Construction
	Plantation
	Technology
	Hotels
	Mining
	Trust
	Infrastructure

5. Name of company currently working for?

_____

6. Who is the recipient of the whistle blowing complaints in your organization?

	Internal Audit
	Compliance
	Investigation
	Human Resource
	Security
	Legal
	None(no whistle blowing program in the organization)

If other, please specify:_____

SECTION B

Please tick (/) the appropriate choice.

PART 1: FRAUD

1. Estimated loss due to **misuse of company assets** over the past two years

	Above RM1 million
	RM 500,001 to RM1 million
	RM 100,001 to RM 500,000
	RM 10,001 to RM 100,000
	Below RM 10,001

2. Estimated loss due to **fraudulent financial reporting** over the past two years

	Above RM1 million
	RM 500,001 to RM1 million
	RM 100,001 to RM 500,000
	RM 10,001 to RM 100,000
	Below RM 10,001

3. Has number of **misuse of company assets** increase, decrease or stay the same over the past 2 years?

1	2	3	4	5
Strongly Decrease	Decrease	Neither increase nor decrease	Increase	Strongly Increase

4. Has number of **fraudulent financial reporting** increase, decrease or stay the same over the past 2 years?

1	2	3	4	5
Strongly Decrease	Decrease	Neither increase nor decrease	Increase	Strongly Increase

5. The company use the following policy measures as the fraud prevention tool:

	Code of Ethics / Conduct
	Whistle blowing policy
	None

PART 2: WHISTLE BLOWING COMPLAINTS PRACTICE

1. The complaints received from **internal whistle blower** within the past two years (2007 to 2008):

	More than 20 genuine whistle blowing complaints
	15 to 20 genuine whistle blowing complaints
	10 to 14 genuine whistle blowing complaints
	5 to 9 genuine whistle blowing complaints
	Less than 5 genuine whistle blowing complaints
	Not Applicable (not responsible for receiving complaints)

2. The complaints received from **external whistle blower** within the past two years (2007 to 2008):

	More than 20 genuine whistle blowing complaints
	15 to 20 genuine whistle blowing complaints
	10 to 14 genuine whistle blowing complaints
	5 to 9 genuine whistle blowing complaints
	Less than 5 genuine whistle blowing complaints
	Not Applicable (not responsible for receiving complaints)

3. The number of whistle blowing complaints from **internal whistle blower** has increase, decrease or stay the same over the past 2 years?

1	2	3	4	5
Strongly Decrease	Decrease	Neither increase nor decrease	Increase	Strongly Increase

4. The number of whistle blowing complaints from **external whistle blower** has increase, decrease or stay the same over the past 2 years?

1	2	3	4	5
Strongly Decrease	Decrease	Neither increase nor decrease	Increase	Strongly Increase

PART 3: WHISTLE BLOWING POLICY

Instructions:

Please indicate the extent of your opinion with the statements describing the whistle blowing policy in your company by "circling" the corresponding box using the following scales:

1 Strongly disagree
2 Disagree
3 Neither agree nor disagree
4 Agree
5 Strongly agree

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1. The whistle blowing policy provides sufficient protection of the whistle blower	1	2	3	4	5
2. The whistle blowing policy is comprehensive and encourages reporting of wrongdoing	1	2	3	4	5
3. The whistle blowing policy is adequately communicated and well distributed	1	2	3	4	5
4. The whistle blowing policy awareness program is conducted regularly	1	2	3	4	5
5. The **code of ethics** is comprehensive and encourages reporting of wrongdoing	1	2	3	4	5
6. The **code of ethics** is adequately communicated and well distributed	1	2	3	4	5
7. All employees need to acknowledge and sign-off their compliance with the **code of ethics** regularly	1	2	3	4	5
8. The **code of ethics** awareness program is conducted regularly	1	2	3	4	5

PART 4: WHISTLE BLOWING COMMUNICATION CHANNEL

1. What mechanism does your company's use as the whistle blowing communication channel? (choose all that apply)

	Telephone
	Internet, Intranet or E-mails
	Fax
	Mail letters
	Do not have a whistle blower complaint system

Other; please specify: _____

2. What kind of whistle blowing communication channel does your company use?

	Anonymous
	Non-anonymous
	Both
	No whistle blowing programs in the company

Please indicate the extent of your opinion with the statements describing the whistle blowing communication channel in your company by "circling" the corresponding box using the following scales:

1 Strongly disagree
2 Disagree
3 Neither agree nor disagree
4 Agree
5 Strongly agree

		Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1	The communication channel provides anonymous reporting of wrongdoing.	1	2	3	4	5
2	The communication channel is easily accessible.	1	2	3	4	5
3	The communication channel is inexpensive.	1	2	3	4	5
4	The communication channel is not complicated.	1	2	3	4	5
5	The communication channel is staffed by expert staff.	1	2	3	4	5
6	The communication channel is staffed by qualified internal staff.	1	2	3	4	5
7	The communication channel is manned by an independent recipient.	1	2	3	4	5
8	The communication channel recipient cannot easily trace the whistle blower identity or location.	1	2	3	4	5

PART 5: WHISTLE BLOWING RECIPIENT

Instructions:

Please indicate the extent of your opinion with the statements describing the internal audit responsibility in your company by "circling" the corresponding box using the following scales:

1 Strongly disagree
2 Disagree
3 Neither agree nor disagree
4 Agree
5 Strongly agree

		Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1	Internal audit is responsible for verifying the compliance with the code of ethics.	1	2	3	4	5
2	Internal audit is responsible for the investigation of the whistle blowing complaints.	1	2	3	4	5
3	Internal audit is responsible for reviewing compliance with company policies and procedures.	1	2	3	4	5
4	Internal audit is responsible for reviewing compliance with the external rules and regulation.	1	2	3	4	5
5	Internal audit is responsible for detecting the fraud indicator via the review of internal control.	1	2	3	4	5

APPENDIX B:

FACTOR ANALYSIS RESULTS

Communalities

	Initial	Extraction
POLICY1	1.000	.809
POLICY2	1.000	.739
POLICY3	1.000	.806
POLICY4	1.000	.534
CODE1	1.000	.692
CODE2	1.000	.760
CODE3	1.000	.779
CODE4	1.000	.790
CC1	1.000	.857
CC2	1.000	.914
CC3	1.000	.940
CC4	1.000	.939
CC5	1.000	.922
CC6	1.000	.954
CC7	1.000	.911
CC8	1.000	.850
IA1	1.000	.786
IA2	1.000	.704
IA3	1.000	.932
IA4	1.000	.928
IA5	1.000	.288

Extraction Method: Principal Component Analysis.

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	8.827	42.033	42.033	8.827	42.033	42.033
2	2.920	13.906	55.939	2.920	13.906	55.939
3	2.457	11.700	67.639	2.457	11.700	67.639
4	1.470	6.998	74.636	1.470	6.998	74.636
5	1.160	5.525	80.161	1.160	5.525	80.161
6	.994	4.731	84.892			
7	.670	3.189	88.082			
8	.551	2.626	90.707			
9	.460	2.190	92.897			
10	.425	2.024	94.922			
11	.248	1.180	96.102			
12	.166	.788	96.891			
13	.151	.718	97.608			
14	.139	.660	98.268			
15	.095	.451	98.719			
16	.085	.404	99.123			
17	.071	.337	99.459			
18	.058	.278	99.738			
19	.029	.136	99.874			
20	.022	.103	99.977			
21	.005	.023	100.000			

Extraction Method: Principal Component Analysis.

Total Variance Explained

Component	Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	6.046	28.791	28.791
2	3.898	18.560	47.352
3	2.836	13.507	60.858
4	2.127	10.127	70.985
5	1.927	9.176	80.161
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			

Extraction Method: Principal Component Analysis.

Component Matrix[a]

	Component				
	1	2	3	4	5
POLICY1	.739	.341	-.258	.251	-.127
POLICY2	.744	-.215	-.169	.287	-.168
POLICY3	.777	-.424	-.037	-.011	-.147
POLICY4	.686	-.231	.069	-.060	.042
CODE1	.516	.306	.531	-.223	.030
CODE2	.585	.107	.590	-.138	-.196
CODE3	.554	.479	.195	-.225	-.392
CODE4	.417	.181	.480	-.530	-.268
CC1	.599	.584	-.335	.084	.194
CC2	.857	-.367	-.143	.065	-.139
CC3	.876	-.362	-.159	.080	-.099
CC4	.871	-.362	-.157	.097	-.123
CC5	.616	-.188	-.146	-.505	.480
CC6	.691	-.188	-.175	-.431	.474
CC7	.877	-.339	-.130	.083	-.055
CC8	.522	.664	-.276	.012	.247
IA1	.493	.723	-.025	.144	.008
IA2	.610	.476	-.144	.280	.076
IA3	.313	-.126	.745	.364	.362
IA4	.309	-.120	.724	.456	.292
IA5	.486	.120	.169	-.072	-.060

Extraction Method: Principal Component Analysis.

a. 5 components extracted.

Rotated Component Matrix[a]

	Component				
	1	2	3	4	5
POLICY1	.516	.721	.137	-.028	-.056
POLICY2	.811	.266	.027	.091	-.034
POLICY3	.852	.000	.202	.073	.185
POLICY4	.598	.097	.235	.176	.283
CODE1	.060	.254	.690	.337	.186
CODE2	.282	.098	.741	.350	.014
CODE3	.183	.434	.733	-.107	-.088
CODE4	.081	-.008	.871	.009	.155
CC1	.179	.878	.067	-.067	.211
CC2	.919	.134	.142	.046	.172
CC3	.926	.163	.118	.063	.198
CC4	.931	.160	.117	.062	.169
CC5	.363	.114	.148	-.013	.869
CC6	.441	.175	.122	.012	.845
CC7	.897	.181	.122	.104	.221
CC8	.038	.877	.113	-.057	.252
IA1	.022	.832	.295	.068	-.049
IA2	.275	.776	.098	.125	.002
IA3	.116	-.017	.171	.941	.052
IA4	.151	.006	.141	.939	-.054
IA5	.267	.230	.371	.127	.096

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

Component Transformation Matrix

Component	1	2	3	4	5
1	.751	.447	.361	.167	.278
2	-.526	.779	.292	-.100	-.149
3	-.215	-.297	.584	.713	-.127
4	.199	.278	-.522	.496	-.604
5	-.270	.169	-.414	.456	.720

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

APPENDIX C:

RELIABILITY RESULTS

Case Processing Summary

		N	%
Cases	Valid	213	100.0
	Excluded[a]	0	.0
	Total	213	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.817	.853	4

Item Statistics

	Mean	Std. Deviation	N
POLICY1	3.1690	.99507	213
POLICY2	3.2582	.63986	213
POLICY3	3.1221	.59410	213
POLICY4	3.0469	.47350	213

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Variances	.494	.224	.990	.766	4.416	.115	4

Case Processing Summary

		N	%
Cases	Valid	213	100.0
	Excluded[a]	0	.0
	Total	213	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.942	.948	2

Item Statistics

	Mean	Std. Deviation	N
CC1	3.0000	.82987	213
CC8	2.9202	.70592	213

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Variances	.593	.498	.689	.190	1.382	.018	2

Case Processing Summary

		N	%
Cases	Valid	213	100.0
	Excluded[a]	0	.0
	Total	213	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.825	.840	4

Item Statistics

	Mean	Std. Deviation	N
CODE1	3.7606	.78545	213
CODE2	3.7465	.67401	213
CODE3	3.3991	.98833	213
CODE4	3.3803	.69431	213

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Variances	.633	.454	.977	.522	2.150	.058	4

Case Processing Summary

		N	%
Cases	Valid	213	100.0
	Excluded[a]	0	.0
	Total	213	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.955	.955	2

Item Statistics

	Mean	Std. Deviation	N
IA3	4.1690	.70012	213
IA4	4.0892	.68441	213

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Variances	.479	.468	.490	.022	1.046	.000	2

Case Processing Summary

		N	%
Cases	Valid	213	100.0
	Excluded[a]	0	.0
	Total	213	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.972	.972	2

Item Statistics

	Mean	Std. Deviation	N
CC5	3.0516	.35310	213
CC6	3.0657	.35740	213

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Variances	.126	.125	.128	.003	1.025	.000	2

APPENDIX D:

DESCRIPTIVE STATISTICS

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
POLICY1	213	1.00	5.00	3.1690	.99507
POLICY2	213	2.00	5.00	3.2582	.63986
POLICY3	213	2.00	5.00	3.1221	.59410
POLICY4	213	1.00	5.00	3.0469	.47350
CODE1	213	1.00	5.00	3.7606	.78545
CODE2	213	1.00	5.00	3.7465	.67401
CODE3	213	1.00	5.00	3.3991	.98833
CODE4	213	1.00	5.00	3.3803	.69431
CC1	213	1.00	5.00	3.0000	.82987
CC2	213	3.00	5.00	3.2207	.55214
CC3	213	3.00	5.00	3.2311	.57464
CC4	213	3.00	5.00	3.2347	.57570
CC5	213	2.00	5.00	3.0516	.35310
CC6	213	2.00	5.00	3.0657	.35740
CC7	213	2.00	5.00	3.2066	.57013
CC8	213	1.00	5.00	2.9202	.70592
IA1	213	1.00	5.00	3.2488	.85730
IA2	213	1.00	5.00	3.2488	.74546
IA3	213	2.00	5.00	**4.1690**	.70012
IA4	213	1.00	5.00	**4.0892**	.68441
IA5	213	1.00	5.00	3.1315	.88039
Valid N (listwise)	213				

Primary party responsible for whistle blowing program	Number (%)
Internal Audit	36 (16.9%)
Human Resource	3 (1.4%)
Others	2 (0.9%)

Estimated fraud losses due to misuse of company assets over the past two years	Number (%)
Above RM1 million	26 (12%)
RM 500,001 to RM1 million	12 (6%)
RM 100,001 to RM 500,000	32 (15%)
RM 10,001 to RM 100,000	39 (18%)
Below RM 10,001	43 (20%)
Not Disclosed	61 (29%)

Estimated fraud losses due to fraudulent financial reporting over the past two years	Number (%)
Above RM1 million	12 (6%)
RM 500,001 to RM1 million	17 (8%)
RM 100,001 to RM 500,000	11 (5%)
RM 10,001 to RM 100,000	34 (16%)
Below RM 10,001	78 (36%)
Not Disclosed	61 (29%)

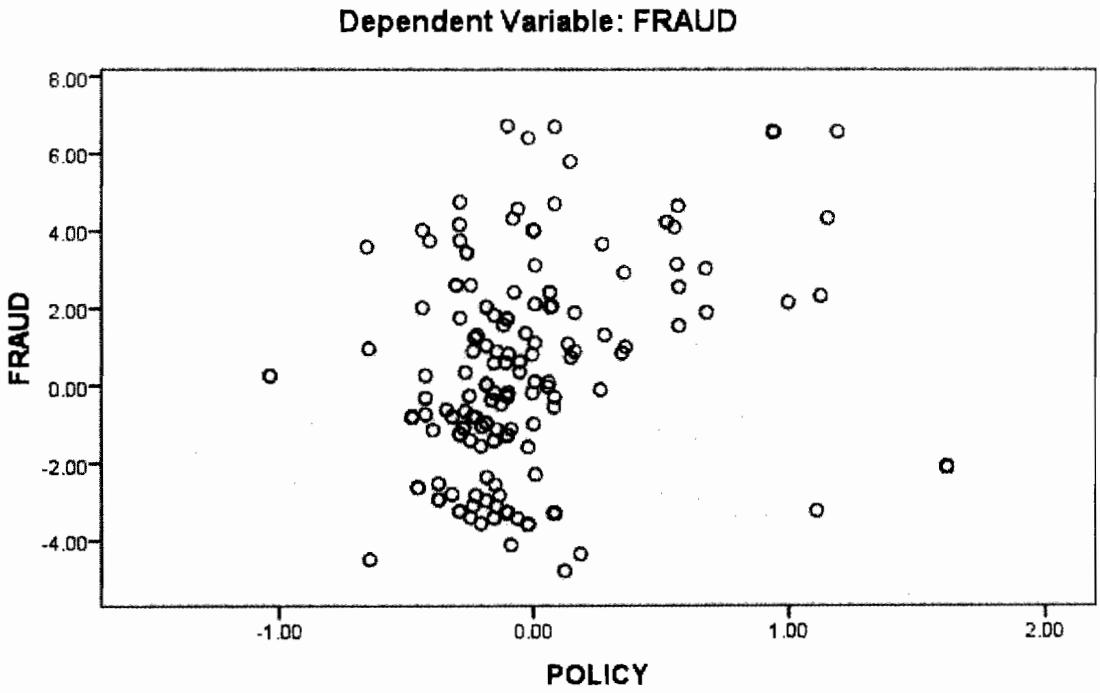
	Less than 5 genuine whistle blowing complaints	5 to 9 genuine whistle blowing complaints	10 to 14 genuine whistle blowing complaints	15 to 20 genuine whistle blowing complaints	More than 20 genuine whistle blowing complaints	Not Applicable
The complaints received from internal whistle blower within the past two years (2007 to 2008):	15	8	4	5	7	174

	Less than 5 genuine whistle blowing complaints	**5 to 9 genuine whistle blowing complaints**	**10 to 14 genuine whistle blowing complaints**	**15 to 20 genuine whistle blowing complaints**	**More than 20 genuine whistle blowing complaints**	**Not Applicable**
The complaints received from external whistle blower within the past two years (2007 to 2008):	15	6	4	2	2	184

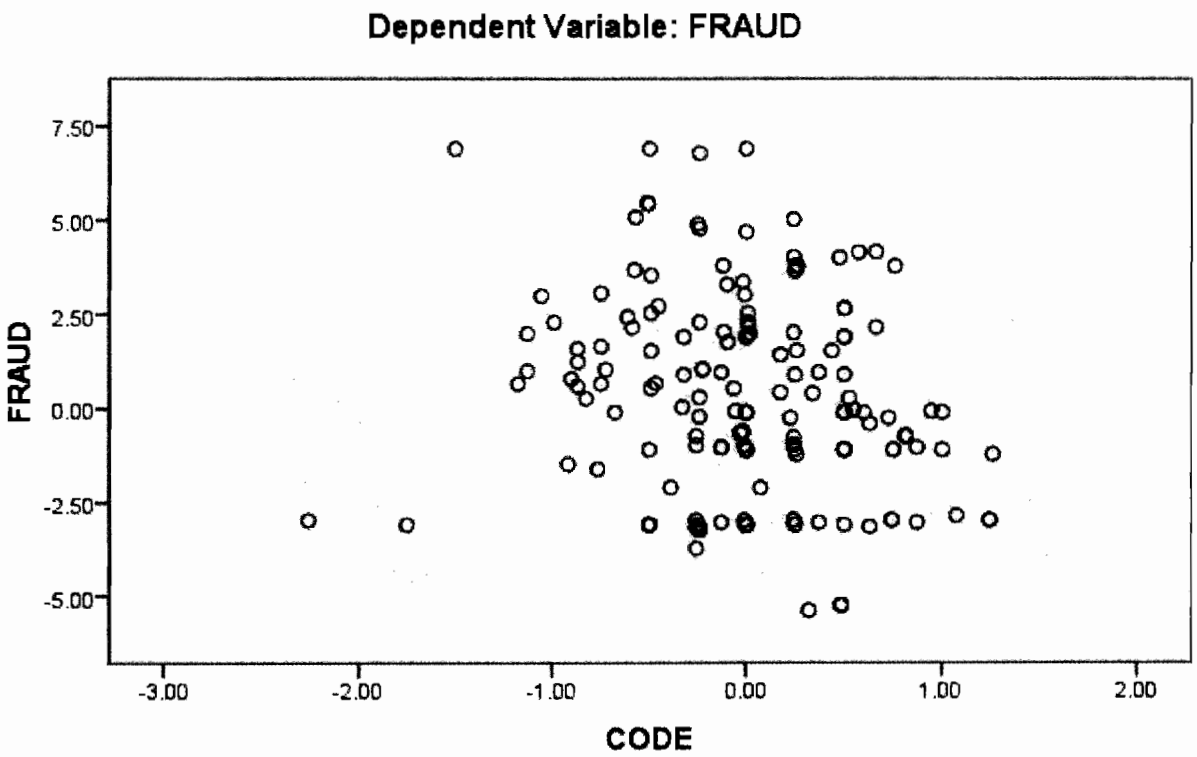
APPENDIX E:

PARTIAL REGRESSION PLOT

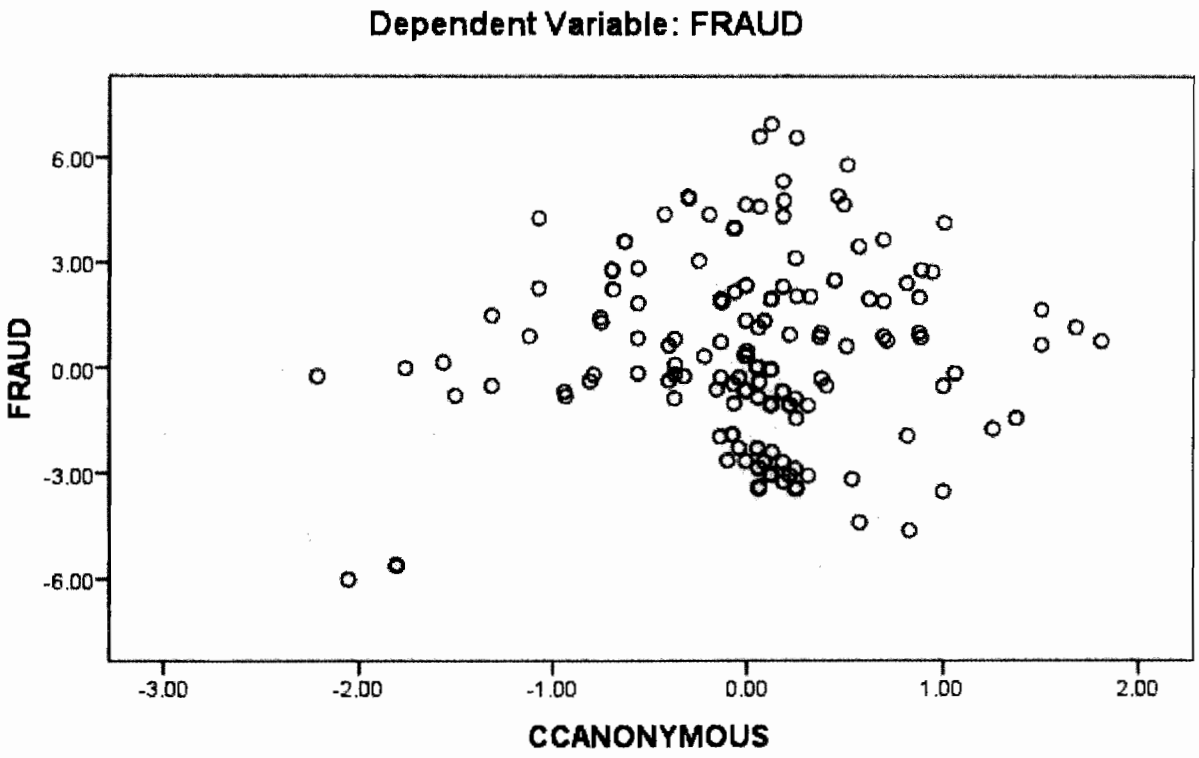
Partial Regression Plot



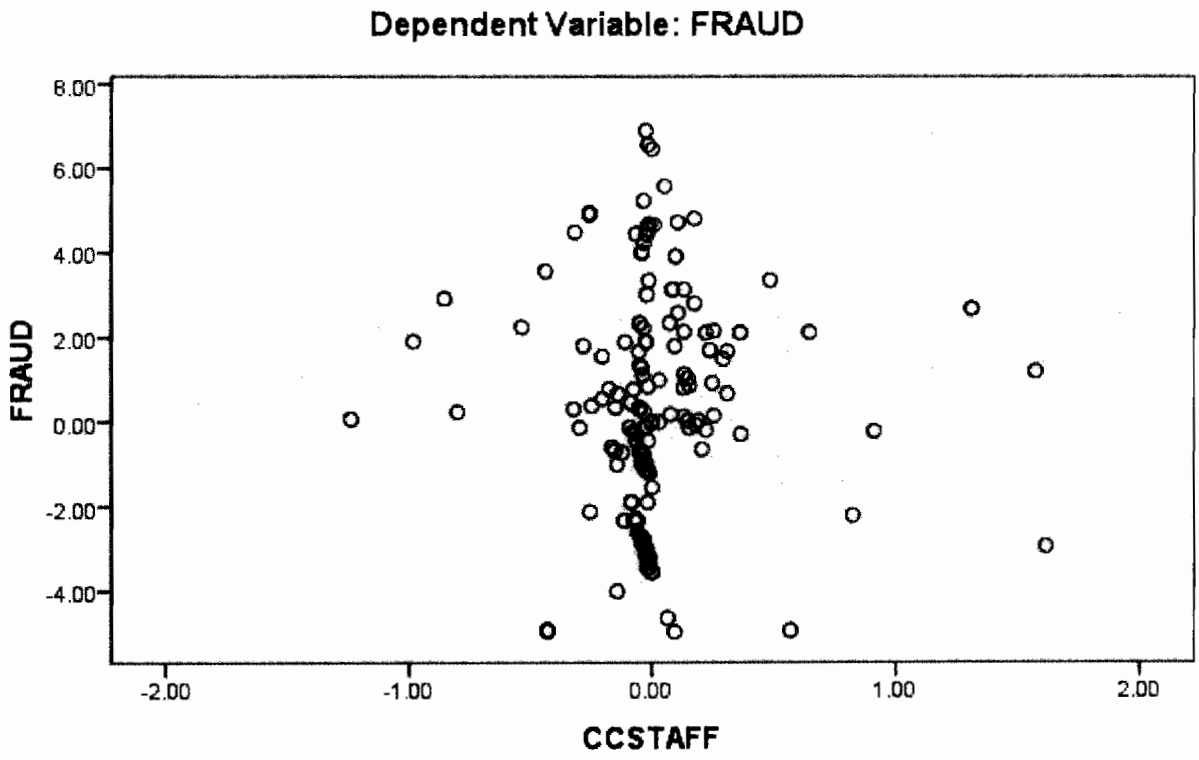
Partial Regression Plot



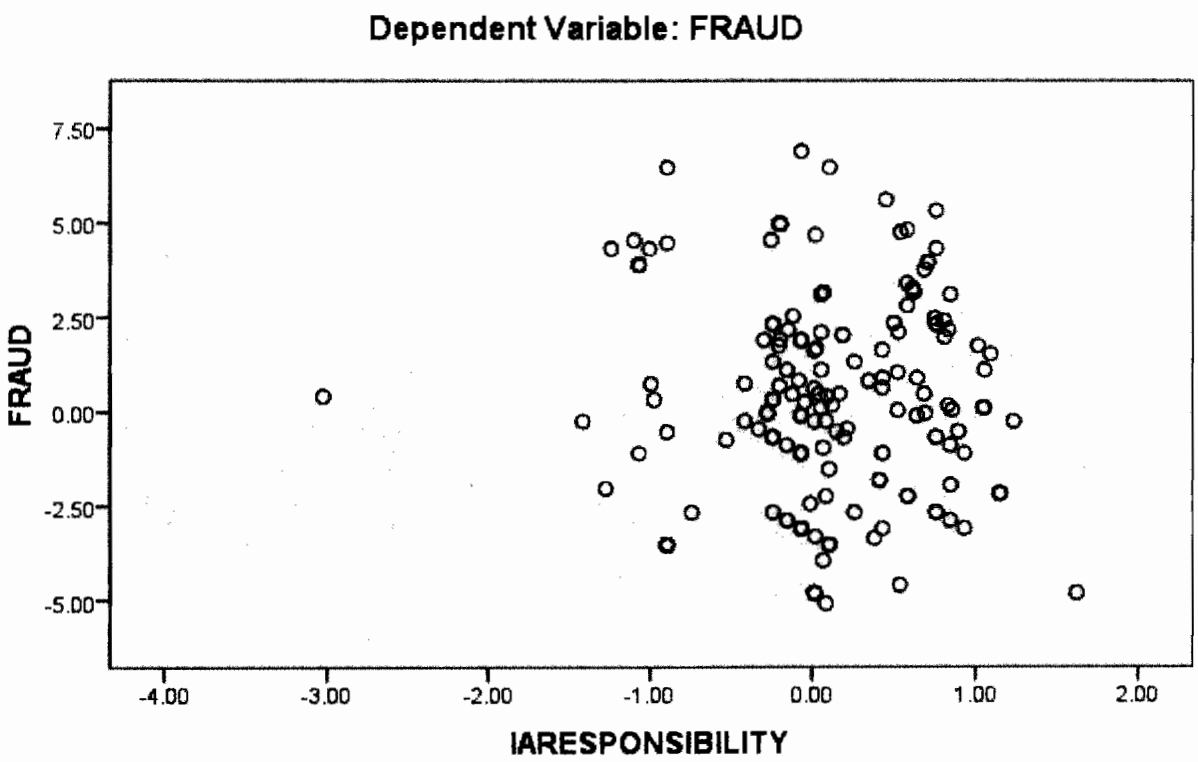
Partial Regression Plot



Partial Regression Plot

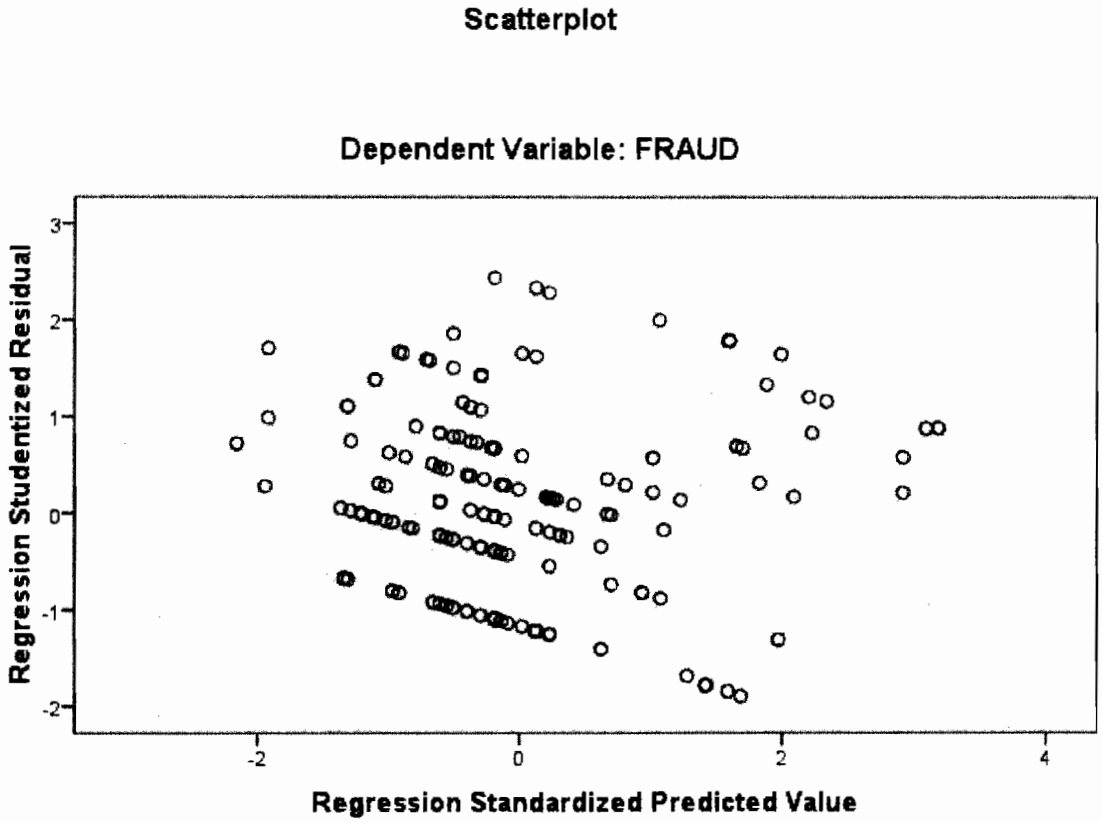


Partial Regression Plot

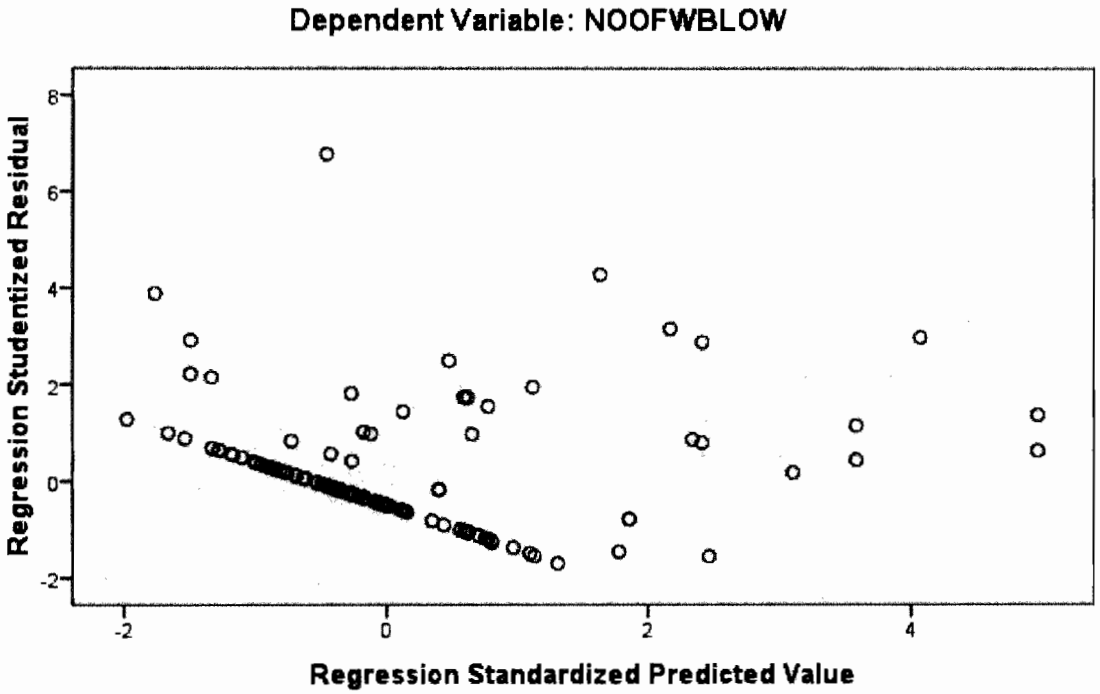


APPENDIX F:

SCATTER PLOT

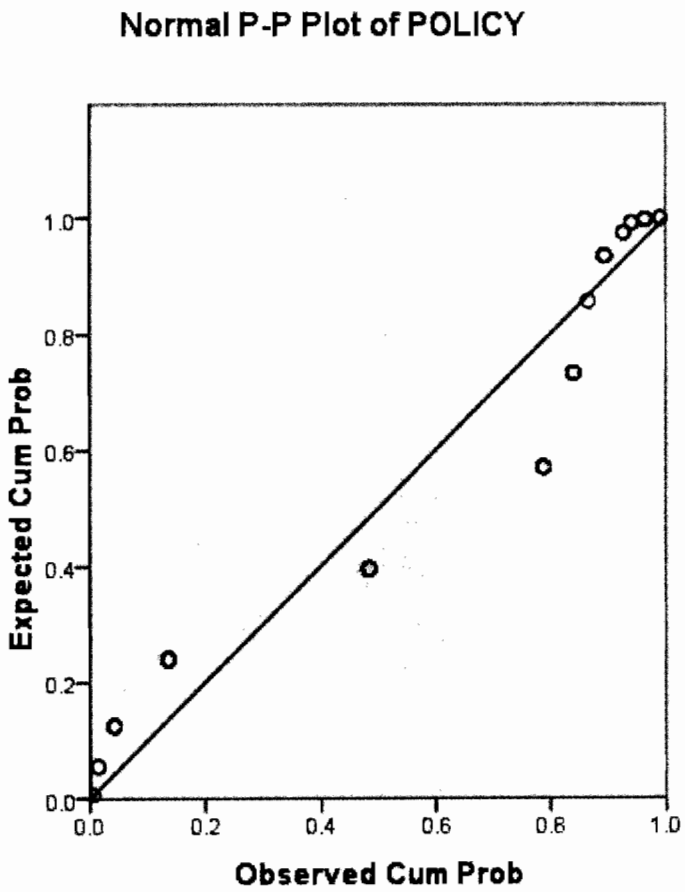

Scatterplot
Dependent Variable: FRAUD
Regression Studentized Residual
Regression Standardized Predicted Value
3
2
1
0
-1
-2
-2
0
2
4

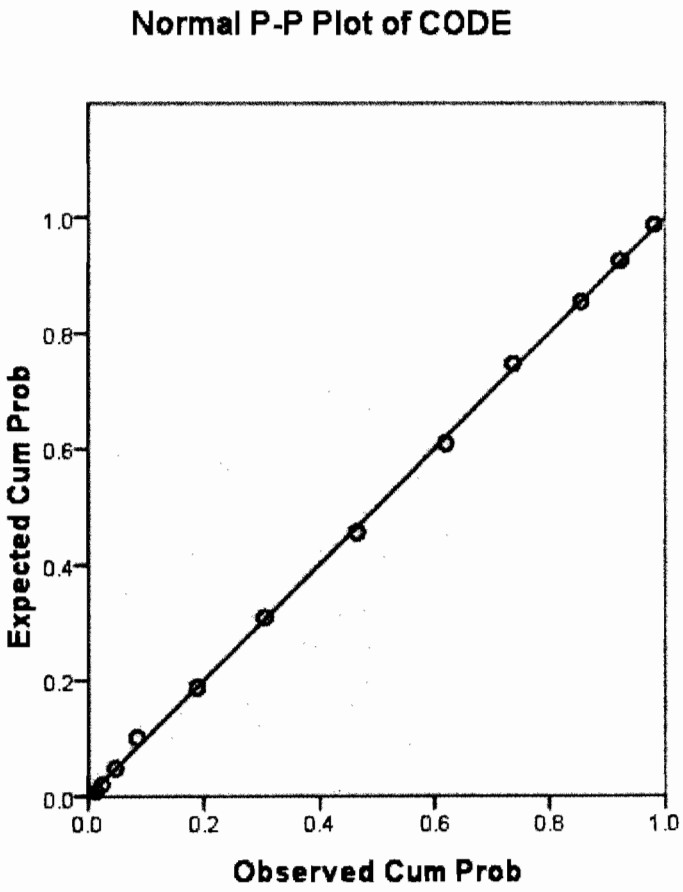
Scatterplot

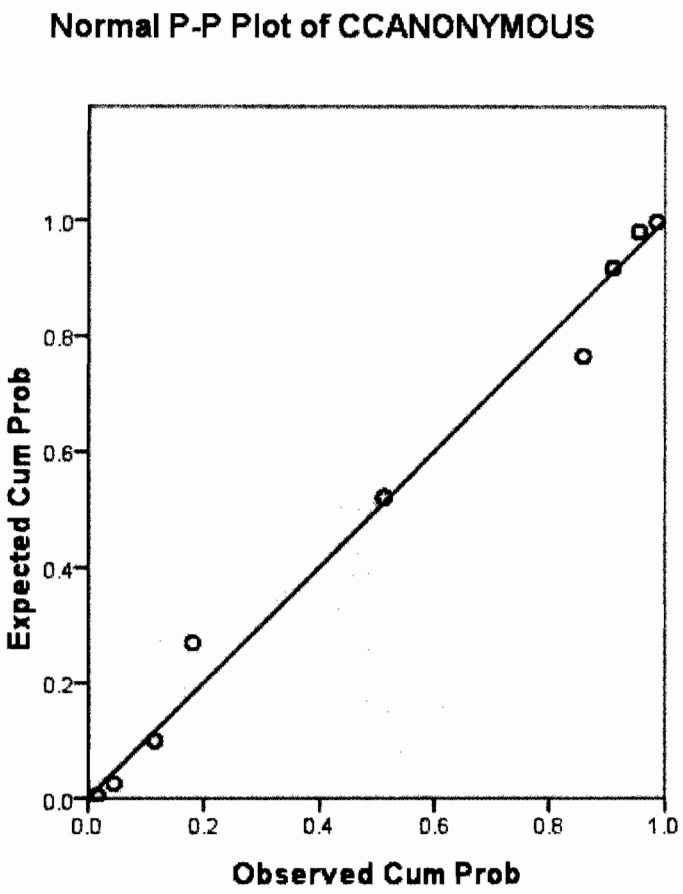


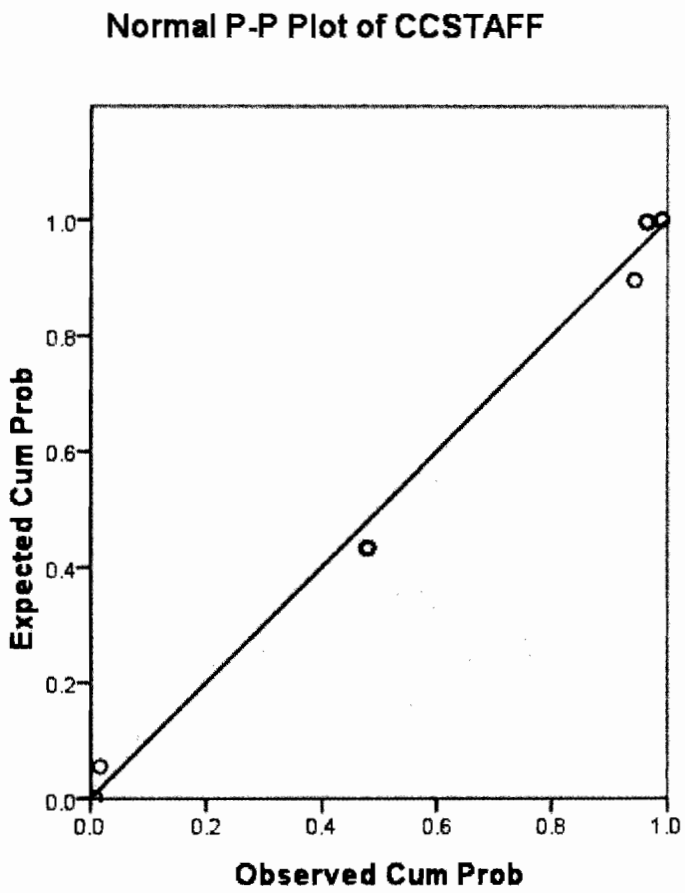
APPENDIX G:

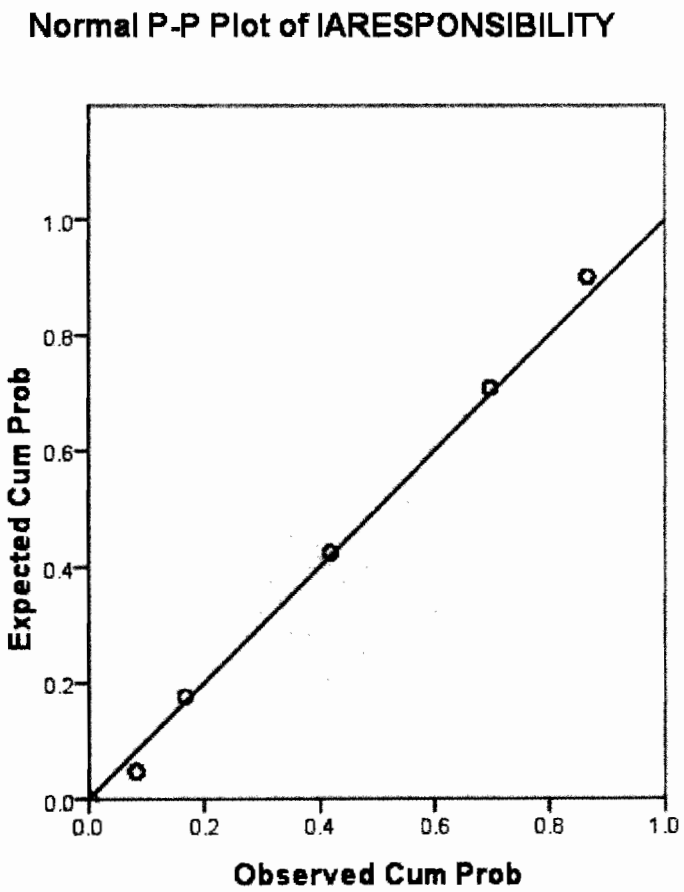
NORMAL PROBABILITY PLOT


Normal P-P Plot of POLICY
Expected Cum Prob
Observed Cum Prob
0.0
0.2
0.4
0.6
0.8
1.0


Normal P-P Plot of CODE
Expected Cum Prob
Observed Cum Prob
0.0
0.2
0.4
0.6
0.8
1.0


Normal P-P Plot of CCANONYMOUS
Expected Cum Prob
Observed Cum Prob
0.0
0.2
0.4
0.6
0.8
1.0


Normal P-P Plot of CCSTAFF
Expected Cum Prob
Observed Cum Prob
0.0
0.2
0.4
0.6
0.8
1.0


Normal P-P Plot of IARESPONSIBILITY
Expected Cum Prob
Observed Cum Prob
0.0
0.2
0.4
0.6
0.8
1.0

APPENDIX H:

REGRESSION ANALYSIS RESULTS

Variables Entered/Removed

Model	Variables Entered	Variables Removed	Method
1	IARESPONSIBILITY, CCANONYMOUS, CCSTAFF, CODE, POLICY[a]	.	Enter

a. All requested variables entered.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.356[a]	.126	.105	2.84389	1.256

a. Predictors: (Constant), IARESPONSIBILITY, CCANONYMOUS, CCSTAFF, CODE, POLICY

b. Dependent Variable: FRAUD

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	242.214	5	48.443	5.990	.000[a]
	Residual	1674.152	207	8.088		
	Total	1916.366	212			

a. Predictors: (Constant), IARESPONSIBILITY, CCANONYMOUS, CCSTAFF, CODE, POLICY

b. Dependent Variable: FRAUD

Coefficients[a]

Model	Unstandardized Coefficients	Standardized Coefficients	

		B	Std. Error	Beta	t	Sig.
1	(Constant)	-1.466	2.044		-.717	.474
	POLICY	1.686	.451	.317	3.733	.000
	CODE	-.895	.361	-.192	-2.480	.014
	CCANONYMOUS	.446	.313	.111	1.427	.155
	CCSTAFF	.286	.649	.033	.441	.660
	IARESPONSIBILITY	.110	.312	.025	.352	.725

a. Dependent Variable: FRAUD

Coefficients[a]

Model		Collinearity Statistics	
		Tolerance	VIF
1	POLICY	.587	1.703
	CODE	.706	1.416
	CCANONYMOUS	.696	1.438
	CCSTAFF	.738	1.355
	IARESPONSIBILITY	.857	1.167

a. Dependent Variable: FRAUD

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	NOOFWBLOW[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: FRAUD

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.374[a]	.140	.136	2.79512

a. Predictors: (Constant), NOOFWBLOW

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	267.891	1	267.891	34.289	.000[a]
	Residual	1648.475	211	7.813		
	Total	1916.366	212			

a. Predictors: (Constant), NOOFWBLOW

b. Dependent Variable: FRAUD

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.876	.205		14.062	.000
	NOOFWBLOW	.577	.099	.374	5.856	.000

a. Dependent Variable: FRAUD

Variables Entered/Removed

Model	Variables Entered	Variables Removed	Method
1	IARESPONSIBILITY, CCANONYMOUS, CCSTAFF, CODE, POLICY[a]	.	Enter

a. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.665[a]	.443	.429	1.47145

a. Predictors: (Constant), IARESPONSIBILITY, CCANONYMOUS, CCSTAFF, CODE, POLICY

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	356.018	5	71.204	32.886	.000[a]
	Residual	448.189	207	2.165		
	Total	804.207	212			

a. Predictors: (Constant), IARESPONSIBILITY, CCANONYMOUS, CCSTAFF, CODE, POLICY

b. Dependent Variable: NOOFWBLOW

Coefficients[a]

Model	Unstandardized Coefficients	Standardized Coefficients	

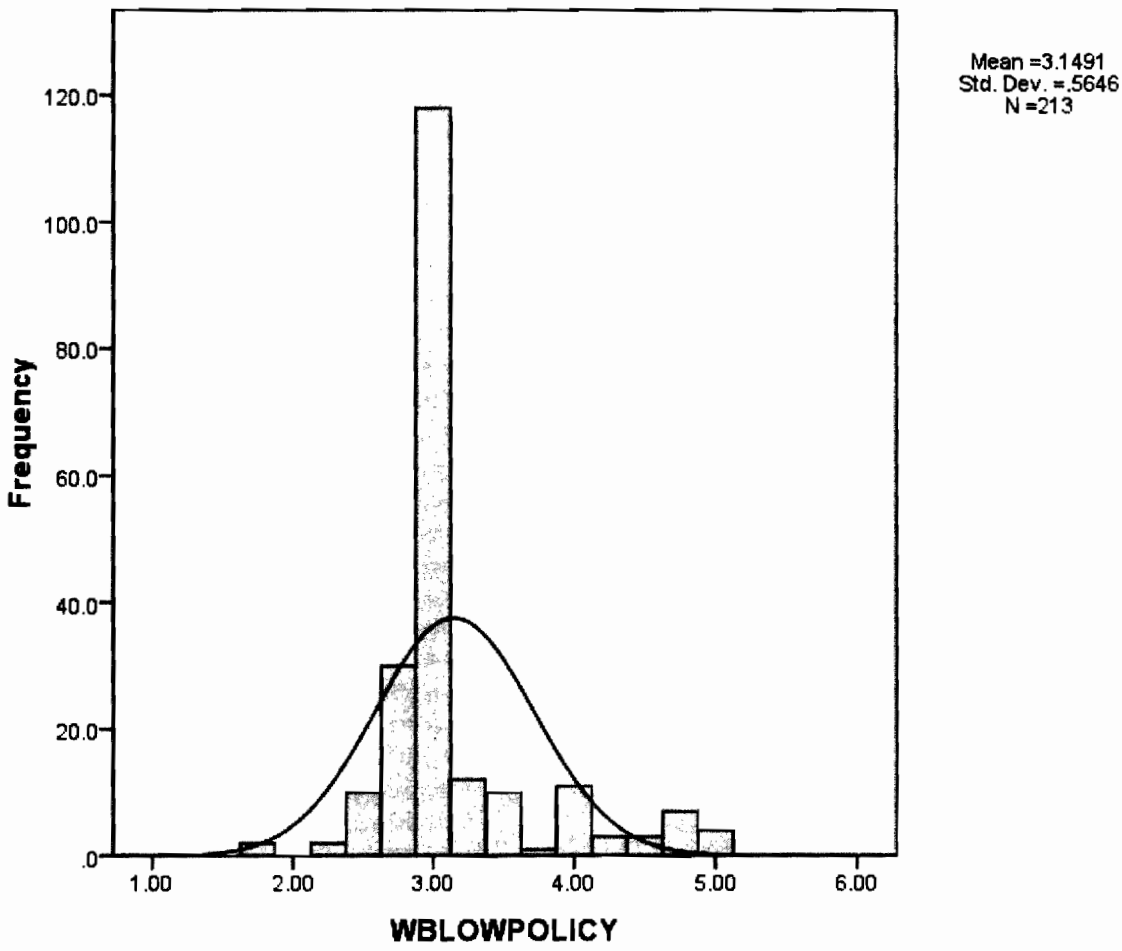
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-9.823	1.058		-9.286	.000
	POLICY	.926	.234	.268	3.963	.000
	CODE	-.457	.187	-.151	-2.448	.015
	CCANONYMOUS	.778	.162	.299	4.806	.000
	CCSTAFF	1.783	.336	.321	5.310	.000
	IARESPONSIBILITY	.366	.161	.127	2.272	.024

a. Dependent Variable: NOOFWBLOW

APPENDIX I:

GRAPHS

Figure 4.1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Std. Dev. =.5646
N =213
Frequency
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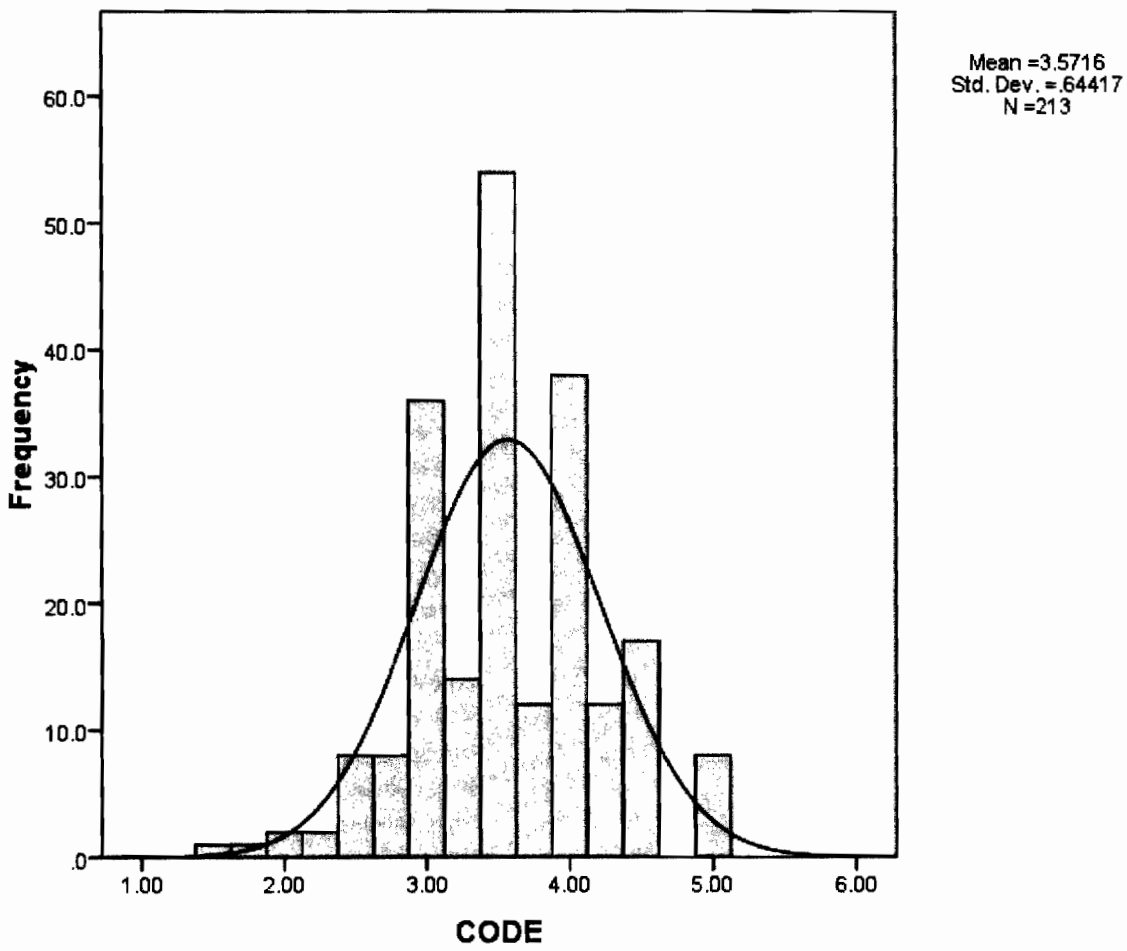
100.0
80.0
60.0
40.0
20.0
.0
1.00
2.00
3.00
4.00
5.00
6.00
WBLOWPOLICY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Std. Dev. =.64417
N =213
Frequency
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30.0
20.0
10.0
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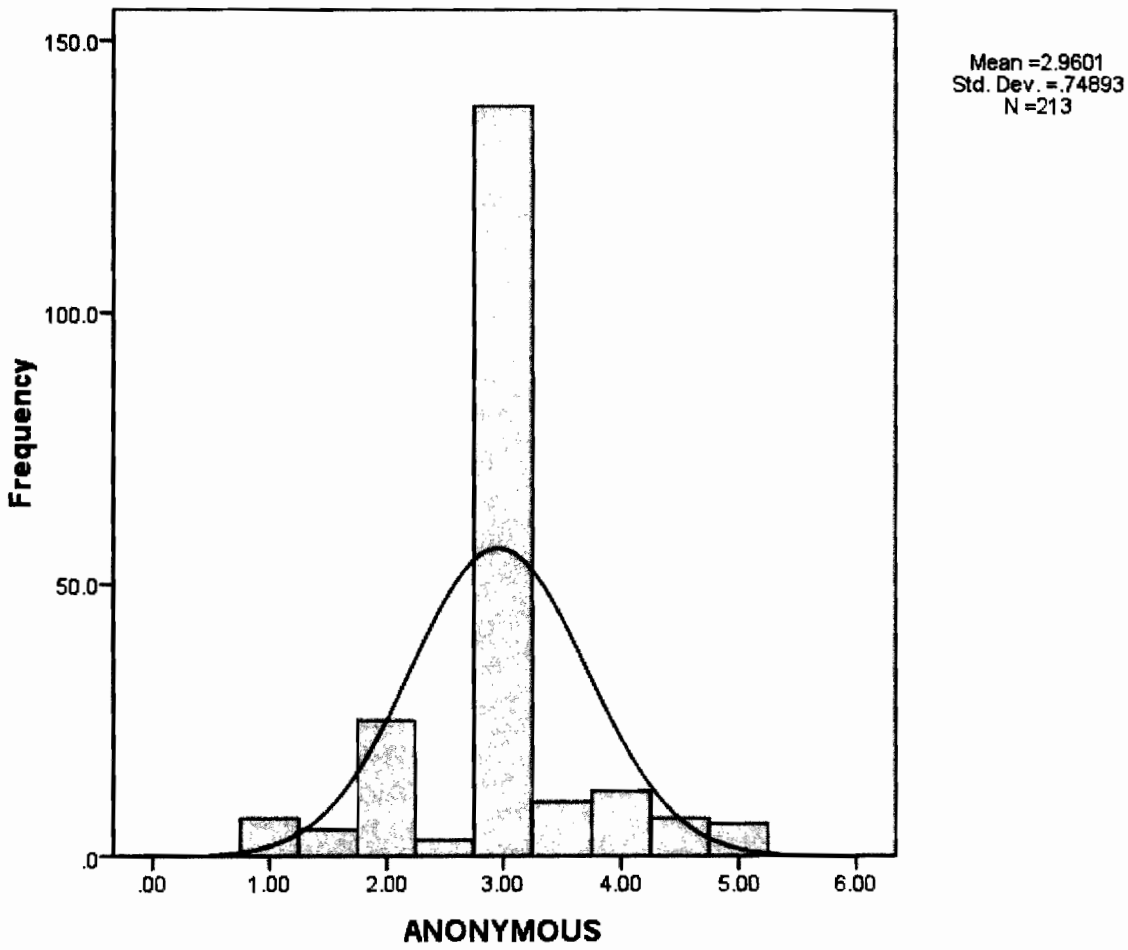
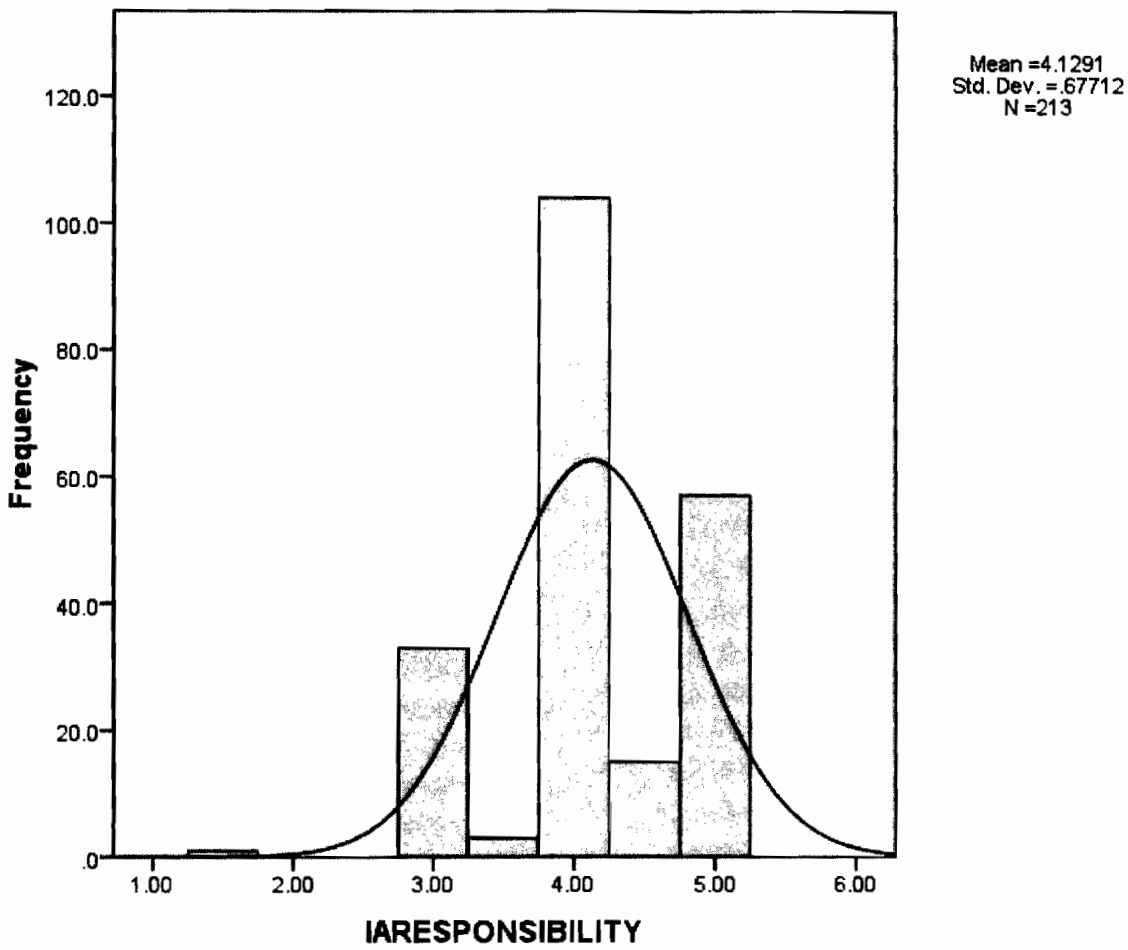
2.00
3.00
4.00
5.00
6.00
CODE


150.0
100.0
50.0
.0
Frequency
.00
1.00
2.00
3.00
4.00
5.00
6.00
ANONYMOUS
Mean =2.9601
Std. Dev. =.74893
N =213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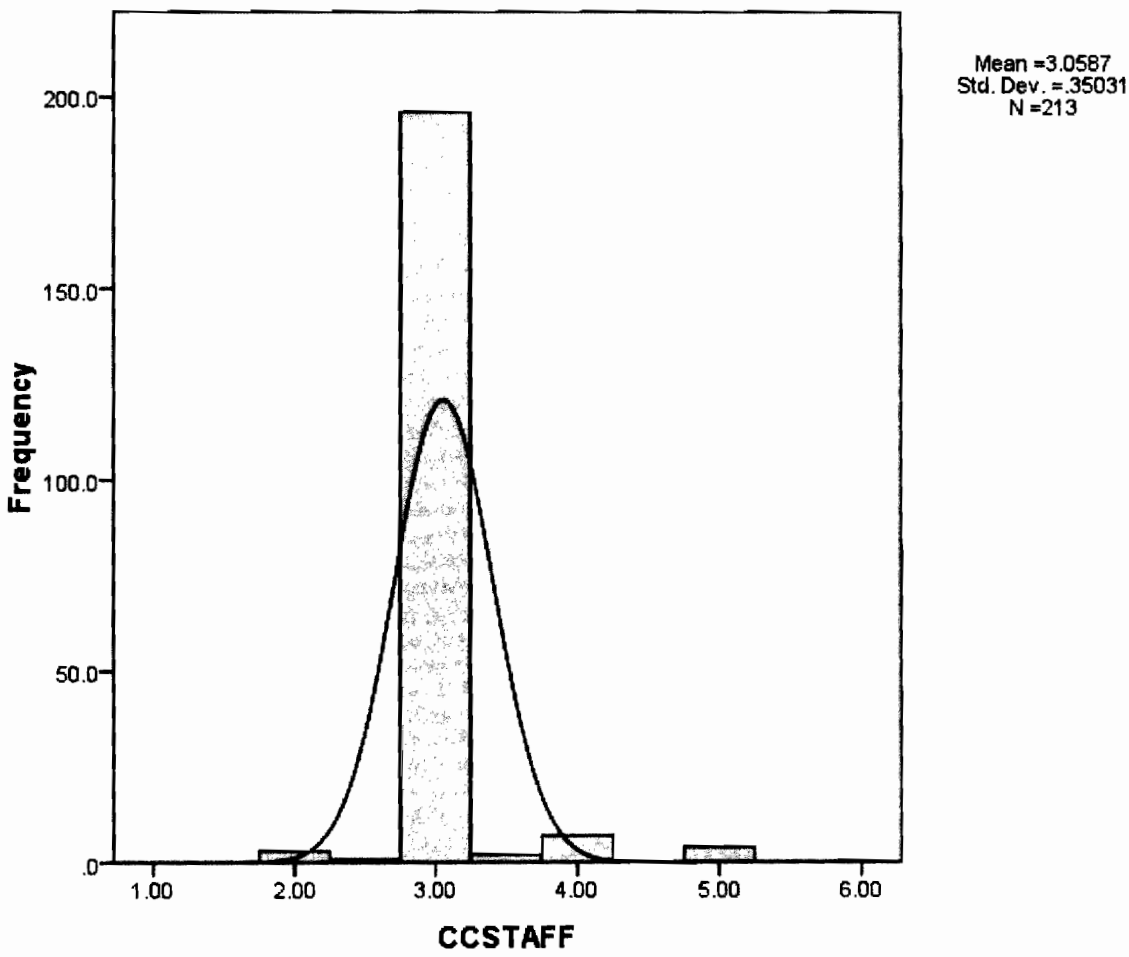
Std. Dev. =.67712
N =213
Frequency
120.0
100.0
80.0
60.0
40.0
20.0
.0
1.00
2.00
3.00
4.00
5.00
6.00
IARESPONSIBILITY


Mean =3.0587
Std. Dev. =.35031
N =213
200.0
150.0
100.0
50.0
.0
Frequency
1.00
2.00
3.00
4.00
5.00
6.00
CCSTAFF